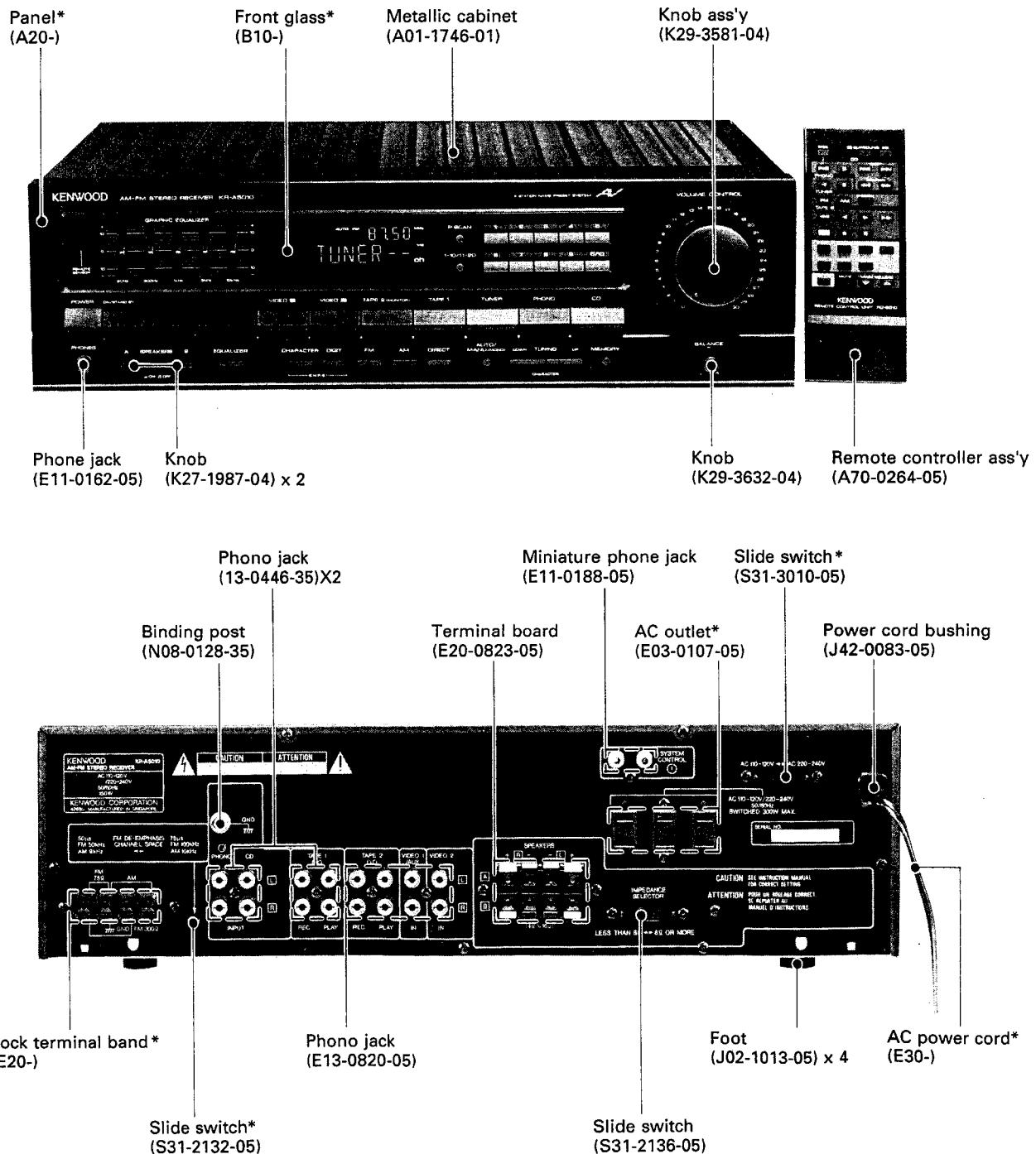


AM/FM STEREO RECEIVER  
**KR-A5010**  
 SERVICE MANUAL

**KENWOOD**  
 KENW-01737

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 B51-3895-00 (O) 2713



\*Refer to parts list on page 42.

# KR-A5010

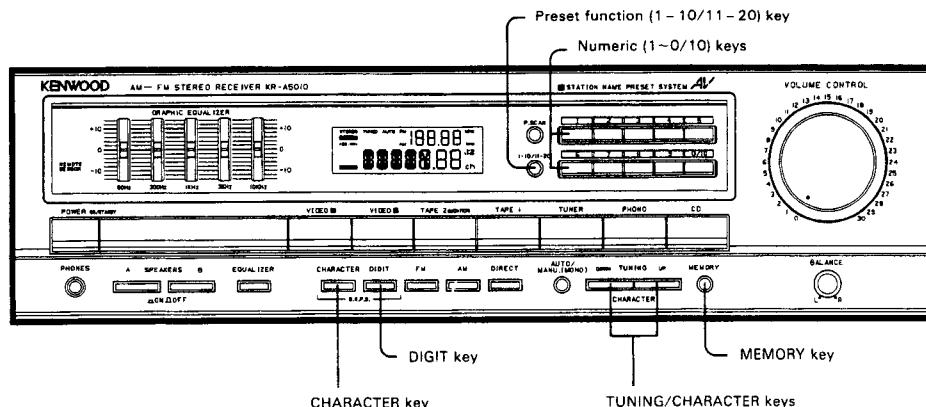
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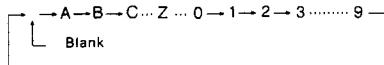
### LISTENING TO BROADCASTS

This unit allows both the frequencies and the names of broadcasting stations to be preset. When a station is recalled by preset tuning, the display shows both the frequency and the name of the station. (S.N.P.S.)

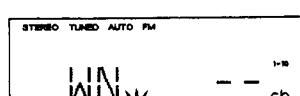
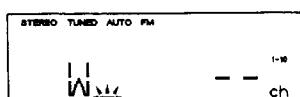
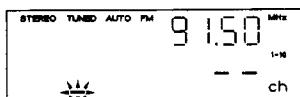


#### Selection of display characters with the TUNING/CHARACTER key

Every time the UP segment of the TUNING/CHARACTER key is pressed, the displayed character is varied in the following order:



(Pressing the DOWN segment varies the displayed character in the reverse order.)

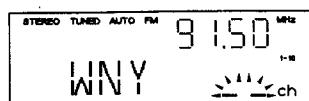


#### ■ To preset station names and frequencies (The station names can be displayed only with station preset in CH 1 to CH 10.)

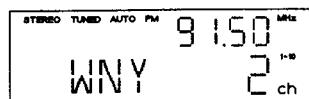
Example 1: To preset the 91.50 MHz FM broadcast frequency and its station name "WN" in preset channel number 2.

1. Tune to 91.50 MHz FM.
2. Press the CHARACTER key.
3. Press the TUNING/CHARACTER key to select "W".
4. Press the DIGIT key to set the character and move to the next location.
5. Press the TUNING/CHARACTER key to select "N".
6. Press the DIGIT key.

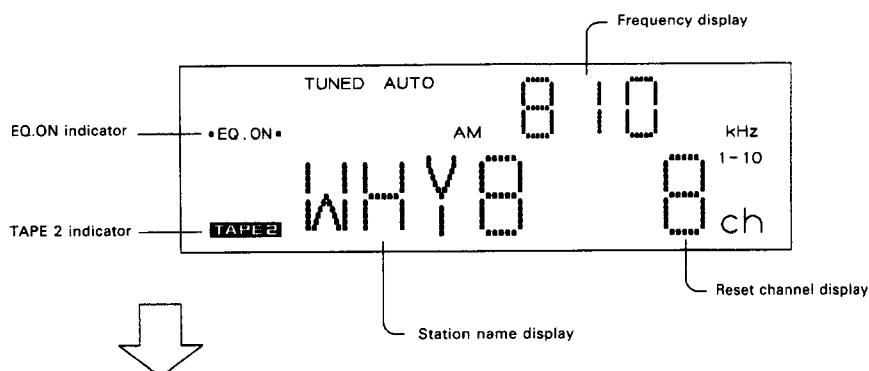
## LISTENING TO BROADCASTS



7. Press the TUNING/CHARACTER key to select "Y".
8. Since the fourth column should be left blank, press the DIGIT key twice or press the CHARACTER key.
9. Press the MEMORY key.



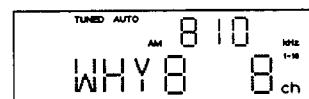
10. Press numeric key "2" to select preset channel 2.



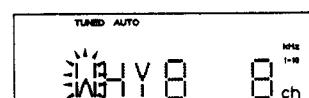
#### ■ To change a preset station name

Example 2: To change the name of the 810 kHz AM broadcast memorized in preset channel 8 to "W G Y".

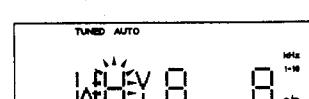
1. Recall the preset channel 8 with the preset function key and the numeric keys according to "Preset tuning".



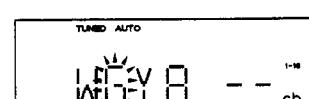
2. Press the CHARACTER key.



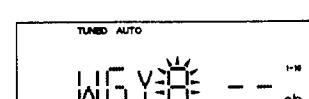
3. Press the DIGIT key to move to the first character location to be changed.



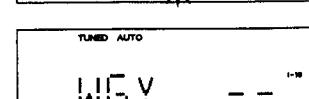
4. Press the TUNING/CHARACTER key to select "G".



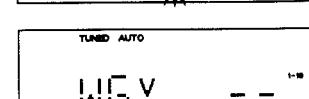
5. Press the DIGIT key twice.



6. Press the TUNING/CHARACTER key to select a blank.



7. Press the DIGIT key or the CHARACTER key.
8. Press the MEMORY key.



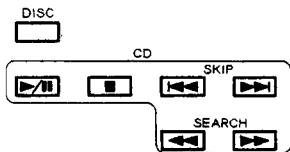
9. Press numeric key "8" to select preset channel number 8.



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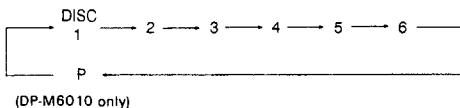
## REMOTE CONTROL

### ■ CD player control keys

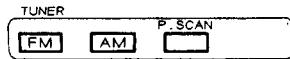


These keys allow the same operations as the keys with the same names on the CD player.

The DISC key is for use exclusively with a multiple CD player. Pressing the DISC key allows one of DISC 1 to DISC 6 to be selected in the following cycle.

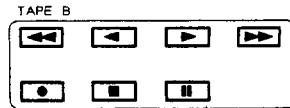


### ■ Tuner control keys



These keys allow the same operations as the keys with the same names on the receiver.

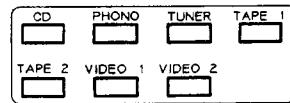
### ■ TAPE B deck control keys



These keys allow the same operations as the keys with the same names on the TAPE B deck.

**Note:**  
When the Fast Forward key is to be pressed after the Rewind key was pressed, press the Stop key first, then press the Fast forward key.

### ■ Input selector keys



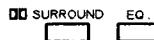
These keys have the same functions as the input selector keys on the receiver.

### ■ POWER key



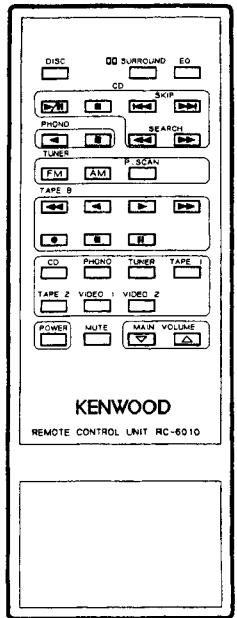
Switches the power of the receiver to ON/STAND-BY (OFF).

### ■ Equalizer/Surround key

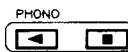


EQ. key has same function as EQUALIZER key on the receiver.

The main body is not equipped with the **■ SURROUND** function.  
Therefore, the **■ SURROUND** key causes no effect even when it is pressed.

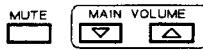


### ■ Turntable (PHONO) control keys



The Play (◀) and Stop (■) keys are provided.

### ■ Volume level keys



#### MAIN VOLUME keys:

Pressing the **▲** key rotates the VOLUME CONTROL on the main body of the unit clockwise to increase the volume, and pressing the **▼** key rotates it counterclockwise to decrease the volume.

#### MUTE key:

The MUTE key is not provided on the main body. The muting can be controlled only from the remote control.

#### To mute the sound temporarily

Press the MUTE key on the remote control unit.

- The point indicator on the MAIN VOLUME CONTROL knob blinks, and the output sound is muted.
- The muting is canceled when the MUTE key is pressed again or the MAIN VOLUME UP or DOWN key is pressed.
- When the muting is canceled, the point indicator on the MAIN VOLUME CONTROL knob stops blinking and starts to light steadily.

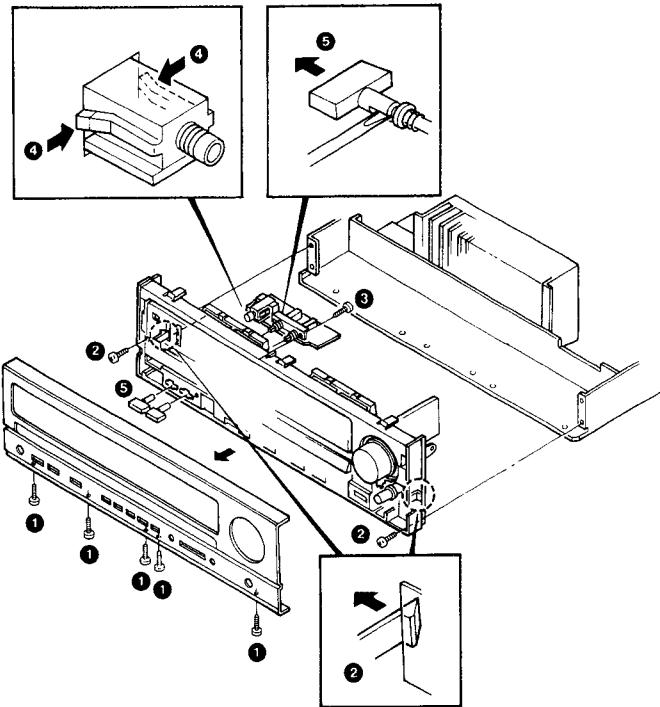
In case any of the following models is used, the CD manual search cannot be operated from this remote control unit:

DP-M97, DP-57, DP-47

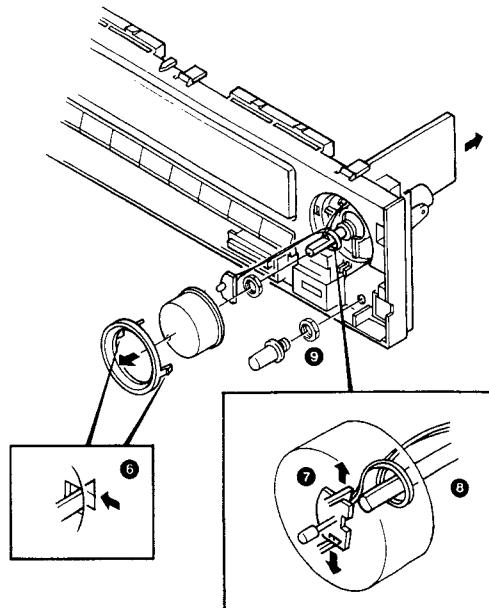
## DISASSEMBLY FOR REPAIR

Before repair work, take out the case.

1. Remove the five screws, then detach the front panel (1).
2. Remove the two screws, then undo the catch of the sub panel (2).
3. Remove the one screw (3).
4. Undo the catch of the PHONES, then detach the PHONES board (X14-) (B/3) (4).
5. Detach the knob using a screwdriver (5).



6. Undo the catch, then detach the knob ring (6).
7. Undo the catch of the VOL LED (7).
8. Disconnect the LED leads (8).
9. Take out the hexagonal washer of the knob (9).

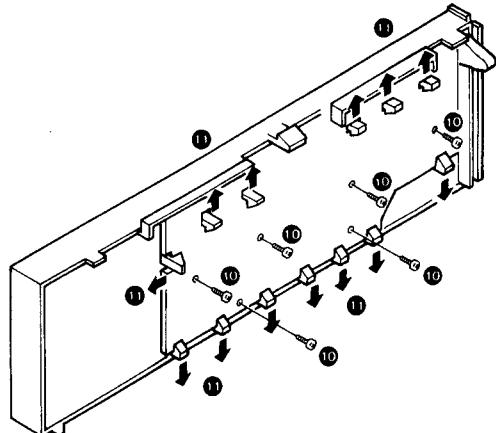


# KR-A5010

## DISASSEMBLY FOR REPAIR

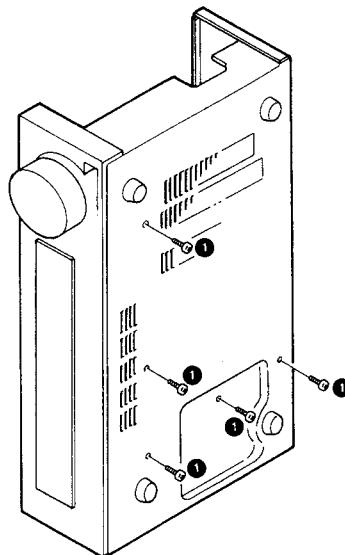
10. Remove the six screws, then detach the display board (X13-) (A/11) (⑩).

11. Undo the 13 catches (⑪).

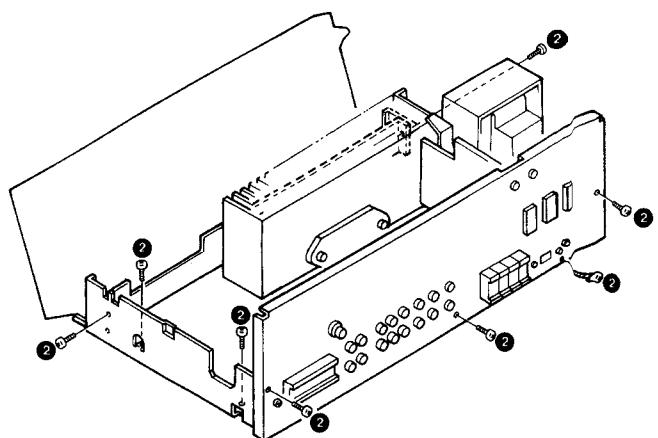


When repairing or checking the main PC board and power supply PC board refer to the following steps.

1. Remove the five screws (①).

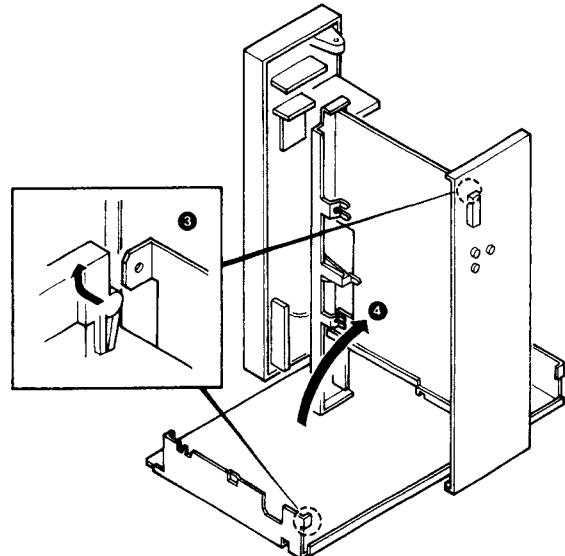


2. Remove the eight screws (②).



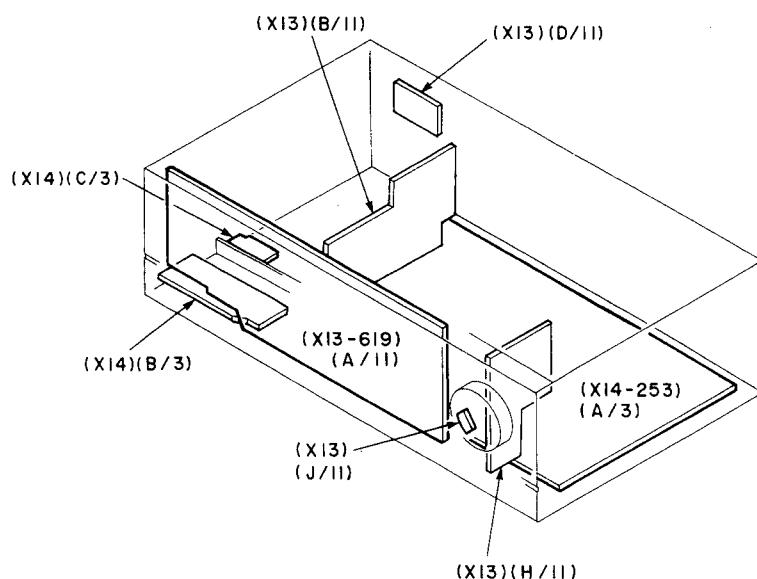
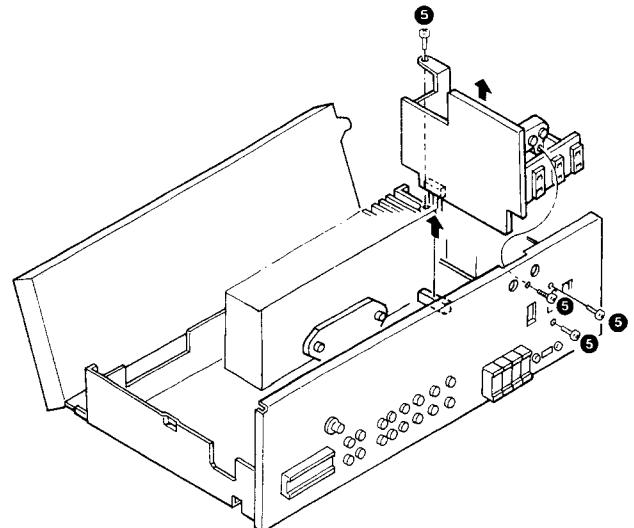
## DISASSEMBLY FOR REPAIR

3. In this way, the FM terminal mold will hit against the chassis. To avoid this, lift up the main body putting aside the rear panel in the direction of an arrow (③ ④).



4. When picking up the power supply block, remove four screws (⑤).

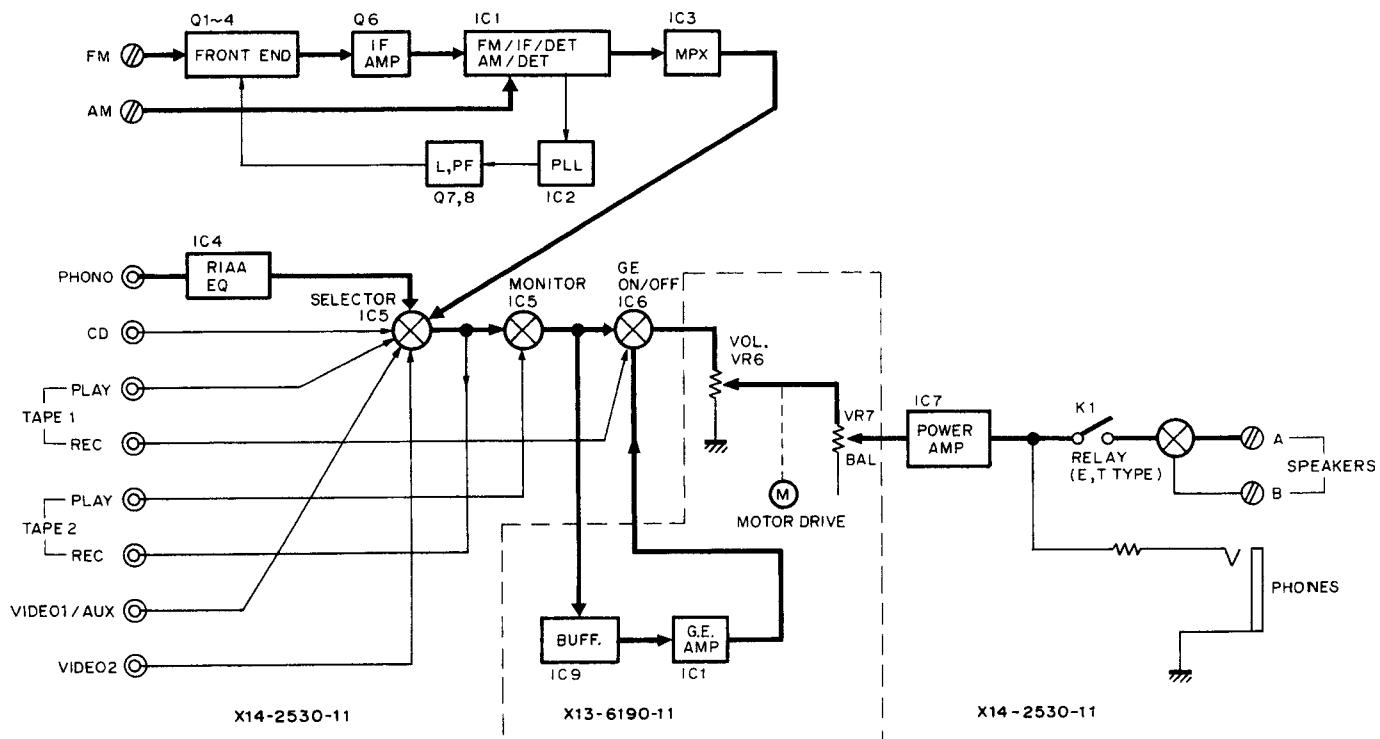
**Note : Be adequately careful in inserting the connector.**



# KR-A5010

## BLOCK DIAGRAM/CIRCUIT DESCRIPTION

### Brock diagram



### Circuit description

#### 1. Description of Components

SUB UNIT (X13-619X-XX) 0-11 : K, P 0-22 : M, U, UE 0-71 : X 2-71 : E

Ref. No.	Part No.	Use/Function	Operation/Condition/Compatibility
IC1 ~ 3	AN6554 NJM2058D $\mu$ PC4574C	Graphic equalizer amplifier	
IC4	PST529C	Reset	Reset for microprocessor.
IC5	CXP5016-330S	Microprocessor	
IC6	LB1641	Motor driver	For volume control.
IC9	NJM4558D M5218P	Buffer amplifier	For equalizer amplifier.
Q1	2SC945(A)(Q,P) 2SC1740S(Q,R)	Reset	For microprocessor.
Q2	2SC945(A)(Q,P) 2SC1740S(Q,R)	Buffer amplifier	For FL driver.
Q3	2SA733(A)(Q,P) 2SA933S(Q,R)	Switch	Channel space selector (M, U, UE type).
Q4, 5	DTC124EN	Indicator drive	Point of volume control knob.
Q6	DTA124EN	Indicator drive	Light <STEREO> letter in FL.
Q11	2SC2003(L,K)	+ AVR	+5.6V.
Q12	2SB772	- AVR	-30V.
Q13	2SC2320(E,F)	Relay driver	Power supply ON/OFF.

## CIRCUIT DESCRIPTION

TUNER UNIT (X14-253X-XX) 0-11 : K, P 0-22 : M, U, UE 0-71 : X 2-71 : E

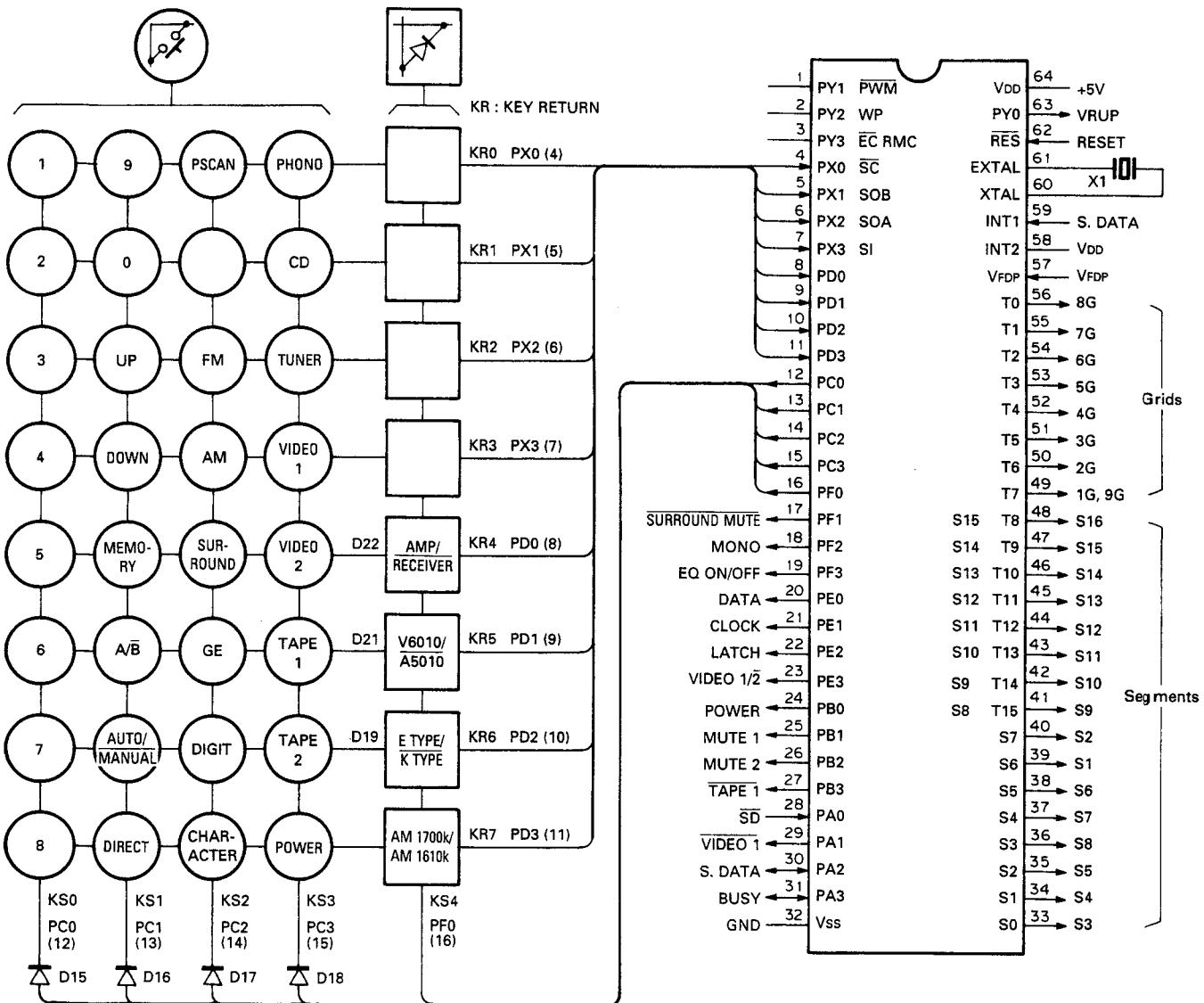
Ref. No.	Part No.	Use/Function	Operation/Condition/Compatibility
IC1	LA1265	FM/AM system IC	FM IF amp detection and control. AM mixing, IF amp and detection.
IC2	CX-7925B	PLL IC for frequency synthesizer	PLL for electronic tuning.
IC3	AN7470	MPX IC	MPX demodulator.
IC4	M5218P-A NJM4558D-A	Equalizer amplifier	Equalizer amplifier for PHONO (MM).
IC5	LC7820	Input selector SW	Analog switch array for input selector switches.
IC6	TC9215P	GE and TAPE 1 SW	Analog switch array for GE ON/OFF and TAPE 1 REC OUT ON/OFF.
IC7	STK4201/2	Main amplifier	Main amplifier (2ch). (K, P, U, UE, M, X type)
IC7	STK4201/5	Main amplifier	Main amplifier (2ch). (E type)
IC8	$\mu$ PC7812HF	Constant voltage power supply	3-pin regulator for the +12V constant voltage power supply.
Q1	2SK241(Y)	RF amplifier	High-frequency amplifier. (K, P, U, UE, M, X type)
Q1	3SK73(GR)	RF amplifier	High-frequency amplifier. (E type)
Q2	2SC1923(O)	Mixing	Frequency converter.
Q3	2SC1923(R,O)	OSC	Local oscillator.
Q4	2SC1923(R,O)	OSC buffer	OSC OUT (oscillator output) for synthesizer.
Q5	2SK161(Y,GR)	OSC buffer	For local oscillator input to mixer. (E type)
Q6	2SC1923(R,O)	FM IF amplifier	10.7MHz amplifier.
Q7	2SC1845(F,E)	LPF	Low pass filter for PLL.
Q8	2SC945(A)(Q,P) 2SC1740S(Q,R)	LPF	Low pass filter for PLL.
Q9	2SC945(A)(Q,P) 2SC1740S(Q,P)	Buffer	Buffer for L6. (E type)
Q10,11	2SC945(A)(Q,P) 2SC1740S(Q,R)	Emphasis switch	ON for 75 $\mu$ s, OFF for 50 $\mu$ s. (M, U, UE type)
Q12	DTC124ES	FM +B control	
Q13	DTA114ES	FM +B control	
Q14	DTC124ES	AM +B control	
Q15	DTA114ES	AM +B control	
Q17,18	2SC2878(B)	Muting	TAPE REC OUT pop noise prevention during switching selector switch.
Q19	2SA733(A)(Q,P) 2SA933S(Q,R)	Muting control	
Q20,21	2SC2878(B)	Muting	Main amplifier pop noise prevention during switching selector switch.
Q22	2SA733(A)(Q,P) 2SA933S(Q,R)	Muting control	
Q25	2SA733(A)(Q,P) 2SA933S(Q,R)	Muting	Main amplifier pop noise prevention during switching power switch.
Q26,27	2SC1845(F,E)	Protection	
Q29	2SA733(A)(Q,P) 2SA933S(Q,R)	Error amplifier	-12V error amplifier.
Q30	2SA733(A)(Q,P) 2SA933S(Q,R)	Constant voltage circuit	-12V.
Q31	2SD1266	Constant voltage circuit	-12V.

# KR-A5010

## CIRCUIT DESCRIPTION

### 2. CXP5016-330S : Microprocessor (X13-619X-XX : IC5)

#### 2-1. Key matrix connections



#### 2-2. Setting of destinations, models and specifications depending upon diode key matrix

The setting of destinations, models and specifications is made according to the initial set diode key matrix. In the following, "1" means "with diodes" and "0", "without diodes".

##### 1) Destination set SW : E type/K type

Destination set SW	Destination	BAND	Reception frequency band	Chennel space	Reference frequency
0	K	FM	87.5 ~ 108.0MHz	100kHz	50kHz
		AM	530 ~ 1610kHz 530 ~ 1700kHz	10kHz	10kHz
1	E	FM	87.5 ~ 108.0MHz	50kHz	50kHz
		AM	531 ~ 1602kHz	9kHz	9kHz

##### 2) Model set SW : AMP/RECEIVER, V6010/A5010

Model set SW	Model	Function		
		Tuner	Dolby surround effect	Video signal I/O
AMP/RECEIVER	V6010/A5010	Provided	Provided	Provided
0	1	KR-V6010	Provided	Provided
0	0	KR-A5010	Provided	Not provided
1	0	KA-78	Not provided	Not provided

##### 3) Specification set SW : AM1700k/AM1610k

With destination set SW at "0" : Effective only for K TYPE

Specification set SW	AM reception frequency band
0	530 ~ 1610kHz
1	530 ~ 1700kHz

## CIRCUIT DESCRIPTION

## 2-3. Explanation of terminals

Pin No.	Pin name	I/O	Name	Function
1	PY1	O	VRDOWN	Volume down operation control. "H" : Volume down operation, "L" : Normal status.
2	PY2	I	BACK UP	Backup (power OFF) detection. "H" : Normal status, "L" : Power OFF. At power ON, an "H" signal is input. When an "L" signal is input, the clock pulse oscillation for the microprocessor is stopped and the backup mode is entered. When the signal is level becomes "H" from "L", the normal status is restored from the backup mode.
3	RMC	I	REMOCON	Remote control signal input. Active "L".
4 ~ 11	PX0 ~ PX3 PD0 ~ PD3	I	KR0 ~ KR7	Key return signal inputs. "H" : with input, "L" : without input.
12 ~ 16	PC0 ~ PC3 PF0	O	KS0 ~ KS4	Key scan signal outputs. Normally "H". When a key is pressed ON, key scan is performed.
17	PF1	O	SURROUND MUTE	Surround effect audio signal output ON/OFF control. "H" : Output ON, "L" : Output OFF.
18	PF2	O	MONO	Compulsory monaural output control. "H" : Monaural, "L" : Stereo.
19	PF3	O	EQ ON/OFF	Equalizer ON/OFF control. "H" : Equalizer ON, "L" : Equalizer OFF.
20	PE0	O	DATA	CX-7925B (PLL IC)/LC7820 (Selector IC) control serial data output. Data is latched at the rise of the clock pulse.
21	PE1	O	CLOCK	CX-7925B/LC7820 control serial data transfer shift clock pulse output. Data is latched at the rise of the clock pulse.
22	PE2	O	LATCH	Data latch signal output to CX-7925B. Data is latched particularly at the rise of the clock pulse.
23	PE3	O	VIDEO 1/2	Video signal selection control. "H" : VIDEO 1, "L" : VIDEO 2.
24	PB0	O	POWER	Power supply circuit relay ON/OFF control. "H" : Relay ON, "L" : Relay OFF.
25	PB1	O	MUTE 1	Line output mute control. "H" : Mute ON, "L" : Mute OFF.
26	PB2	O	MUTE 2	TAPE 2 recording output mute control. "H" : Mute OFF, "L" : Mute ON.
27	PB3	O	TAPE 1	TC9215P (Selector IC) control. TAPE 1 recording output ON/OFF control. "H" : Others, "L" : TAPE 1.
28	PA0	I	SD	Tuner tuning detection. "H" : No signal, "L" : Tuned.
29	PA1	O	VIDEO 1	TC9215P (Selector IC) control. VIDEO 1 recording output ON/OFF control. "H" : Others, "L" : VIDEO 1.
30	PA2	O	SDATA	Serial data output. Shorted with pin 59 for use.
31	PA3	I/O	BUSY	Serial busy signal I/O.
32	Vss	I	GND	GND.
33 ~ 48	S0 ~ S15	O	S1 ~ S16	FL tube segment drive signal outputs.
49 ~ 56	T7 ~ T0	O	1G ~ 9G	FL tube digit drive signal outputs. (However, grids 1G and 9G identical with each other.)
57	VFDP	I	VFDP	FL tube output driver circuit power supply.
58	INT2	I	-	Unused pin. Shorted with Vdd.
59	INT1	I	SDATA	Serial data input. Shorted with pin 30 for use.
60	XTAL	O	XTAL	Clock pulse generation circuit output.
61	EXTAL	I	EXTAL	Clock pulse generation circuit input.
62	RST	I	RESET	Reset signal input.
63	PY0	O	VRUP	Volume up operation control. "H" : Volume up operation, "L" Normal operation.
64	Vdd	I	Vdd	Positive power supply.

## CIRCUIT DESCRIPTION

### 2-4. Initial setting

#### 1) Function initial setting

Last channel memory .....	FM : 87.5MHz
.....	AM (K) : 530kHz
.....	AM (E) : 531kHz
Station name last channel memory/	
station name preset channel memory .....	All blank
Tuning mode .....	Auto
Preset channel memory .....	Ch1-Ch20 all at FM 87.5MHz
Band .....	FM
1-10/11-20 .....	1-10
Input selector .....	Tuner
Video monitor .....	VIDEO 1
Dolby surround .....	OFF
Equalizer .....	DEFEAT
TAPE 2 monitor .....	OFF
Muting .....	OFF
Power .....	OFF

#### 2) Microprocessor output port initial setting

Any figure in ( ) is a pin number.

SURROUND MUTE (17) .....	L
MONO (18) .....	L
EQ ON/OFF (19) .....	L
VIDEO1/2 (23) .....	H
POWER (24) .....	L
MUTE 1 (25) .....	H
MUTE 2 (26) .....	H
TAPE 1 (27) .....	H
VIDEO 1 (29) .....	H
VRDOWN (1) .....	L
VRUP (63) .....	L

The initial setting is performed in a following event :

1. When backup memory data is destroyed when reset is applied to the microprocessor.
2. When the power cord is plugged in to the AC wall outlet while pressing the TUNER key or MEMORY key.
3. When serial code "TEST : 71" is received during the test mode.

### 2-5. Test mode setting

#### 1) Method of entering the test mode

1. While pressing the TUNER key and VIDEO 1 key, plug the power cord to the AC wall outlet.
2. When the test mode is unengaged, sent serial code "71".

In either case of 1 or 2, when the test mode is entered, the FL tube display all lights.

#### 2) Method of canceling the test mode

1. Unplug the power cord from the AC wall outlet once.
2. Send the reset signal to the RESET pin or some other means to reset the microprocessor.
3. Send serial code "71". In this case, the microprocessor, when it receives serial code "71", engages the same state as when initial reset is applied. Thus, the RAM is once all cleared to enter the initial set state.

#### 3) Contents of test mode

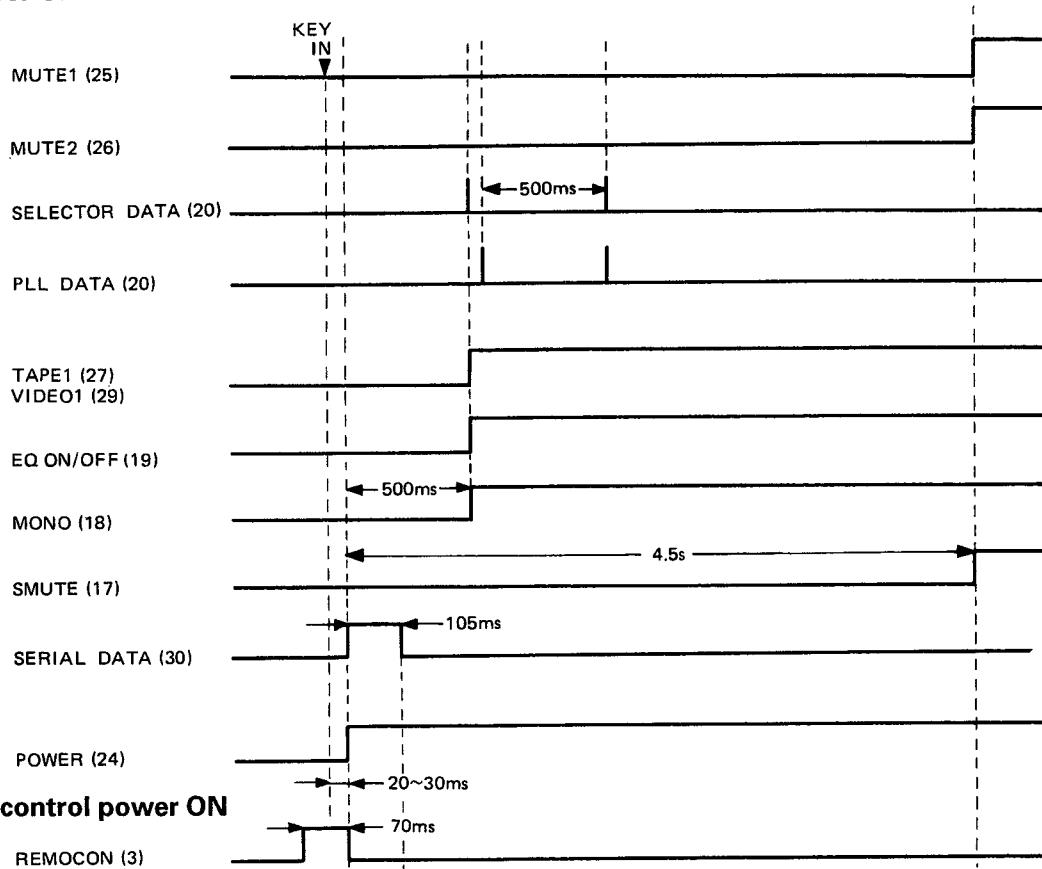
1. When the test mode is entered, the FL tube display all lights. This all lighting continues unless a effective remote control serial code or the test mode is canceled.
2. The test frequency is stored in memory for each preset channel. (For each frequency to be stored in memory, refer to its associated listing.)
3. When serial data is received, an operation different then the normal mode is performed. (About the operation of each code, refer to the serial test code table.) When a forbidden code is received, an uncontrolled run may occur, so that proper operation cannot be ensured.

## CIRCUIT DESCRIPTION

## 2-6. Muting timing charts

## (1) At power ON

- At key power ON

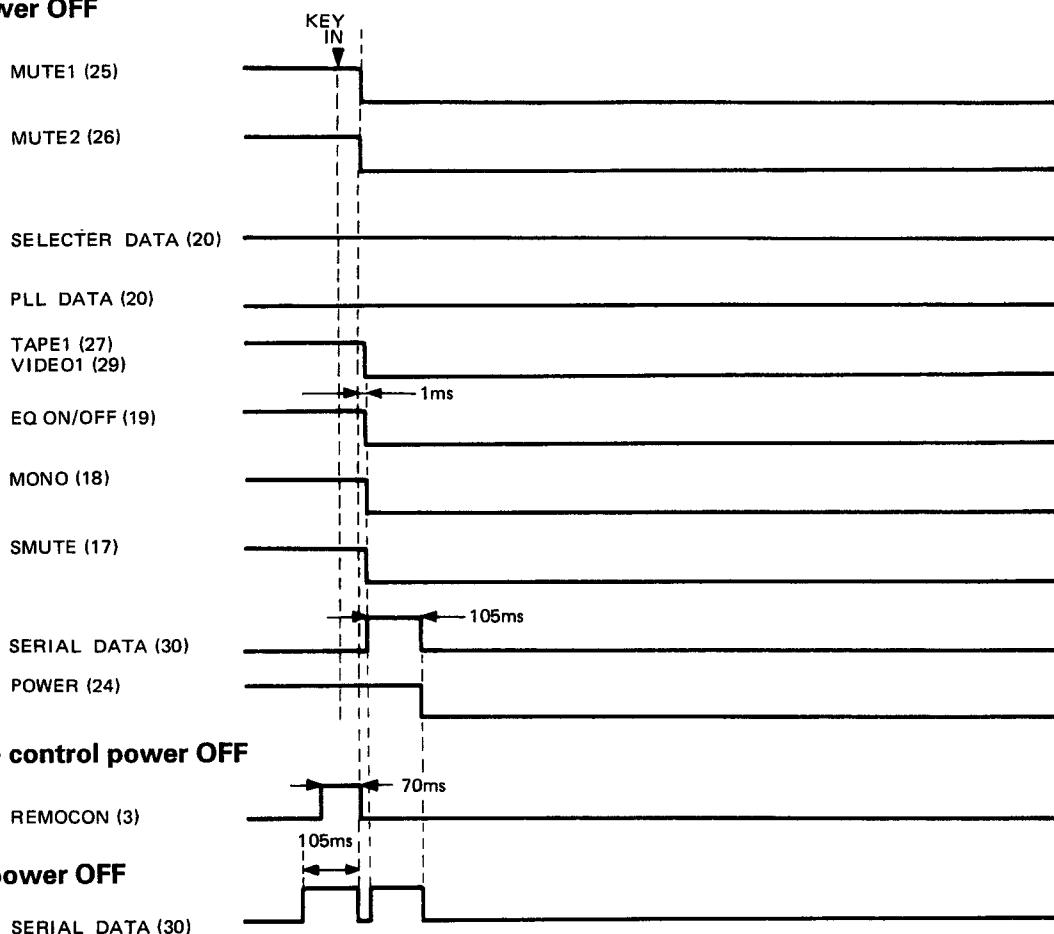


- At remote control power ON

## CIRCUIT DESCRIPTION

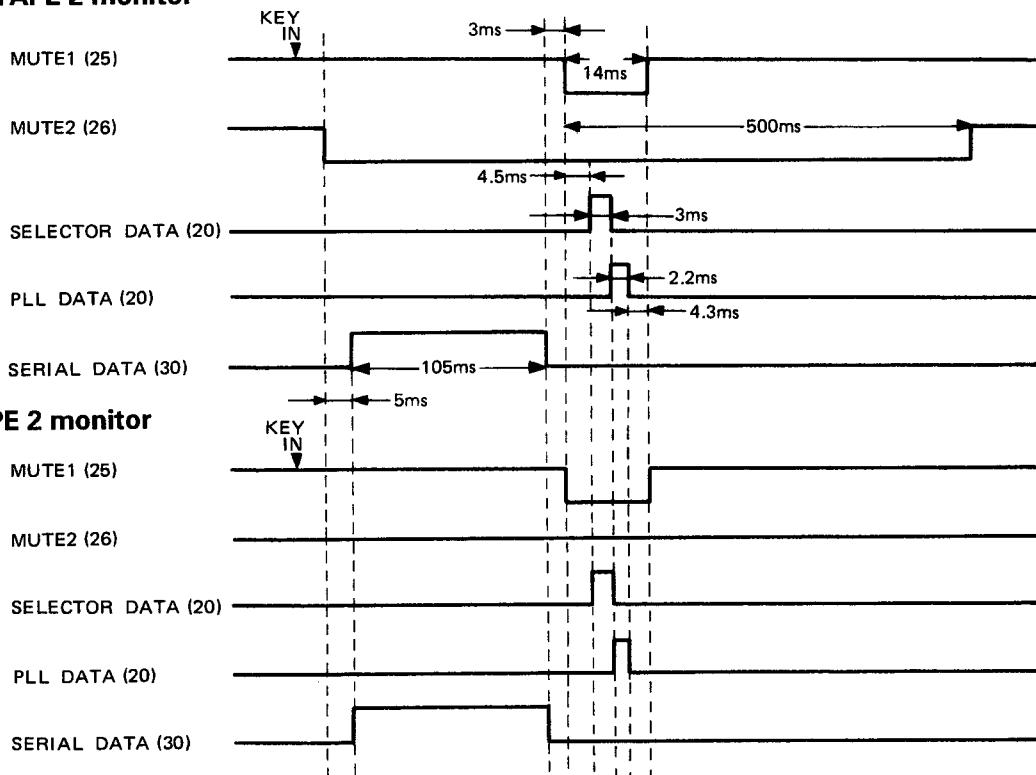
### (2) At power OFF

- At key power OFF



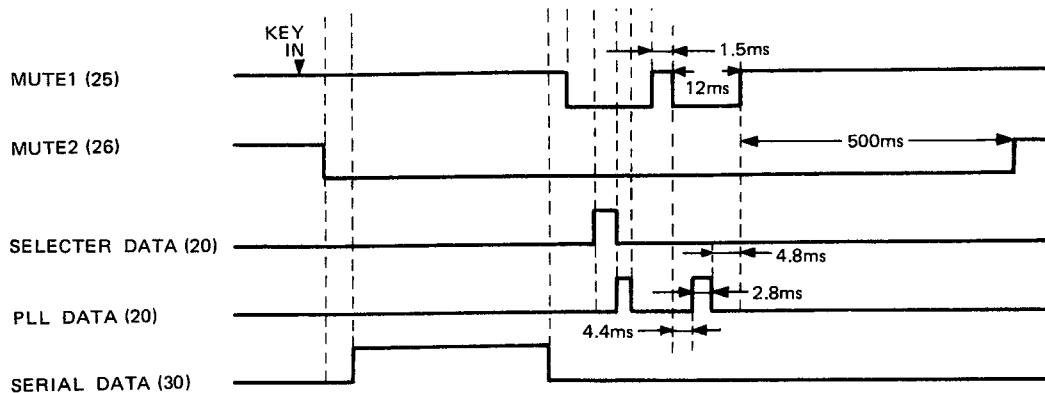
### (3) At input selector selection

- Except for TAPE 2 monitor



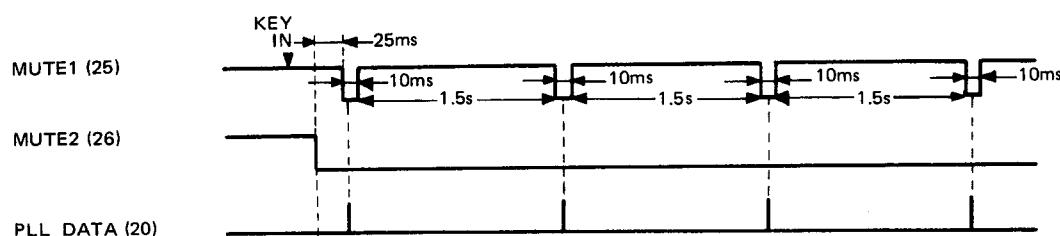
## CIRCUIT DESCRIPTION

### (4) At preset channel call

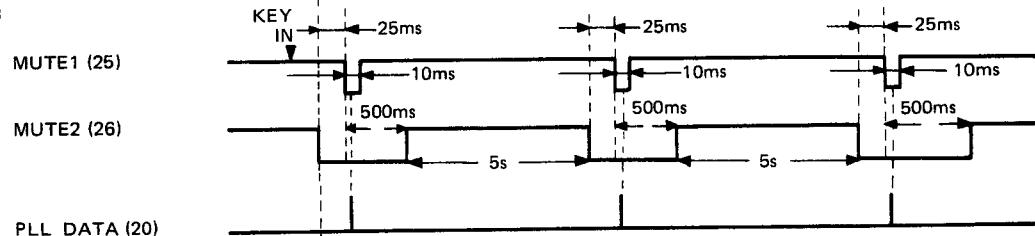


### (5) At preset channel scan

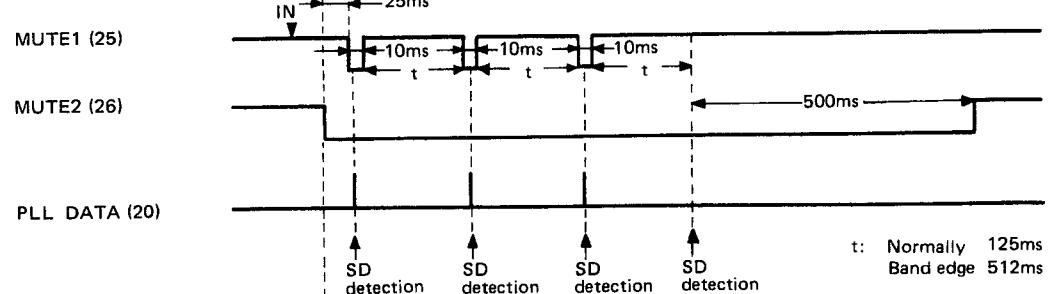
- Without station



- With station



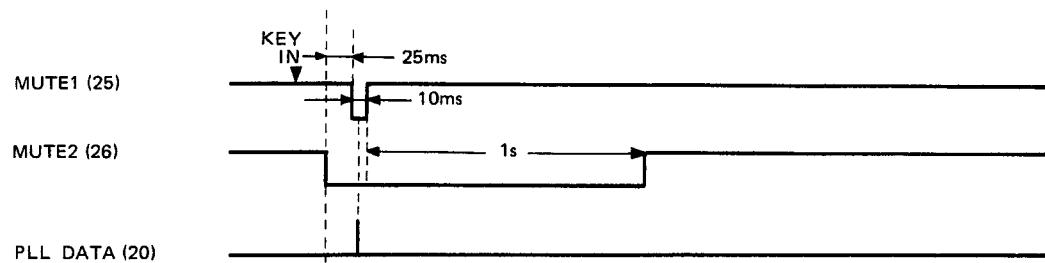
### (6) At auto tuning



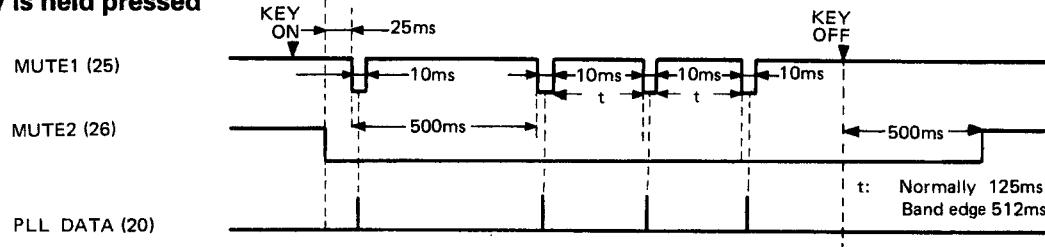
## CIRCUIT DESCRIPTION

### (7) At manual tuning

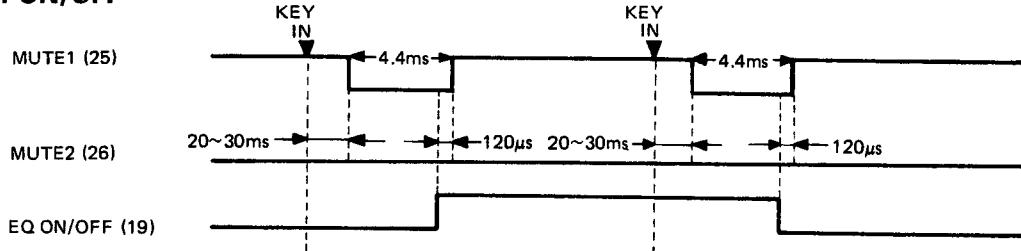
- When key is pressed simply



- When key is held pressed



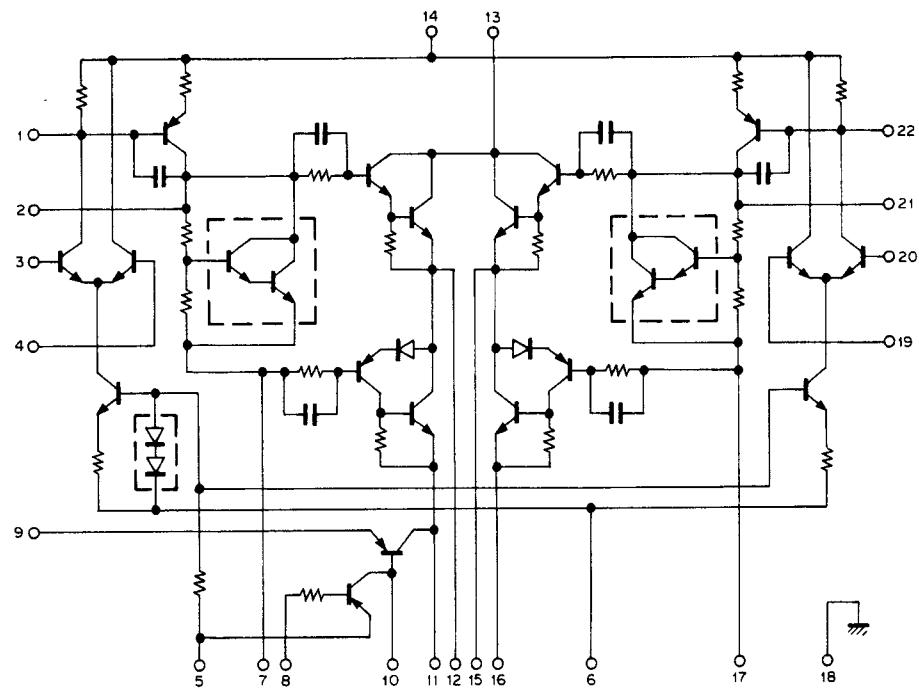
### (8) At equalizer ON/OFF



## CIRCUIT DESCRIPTION

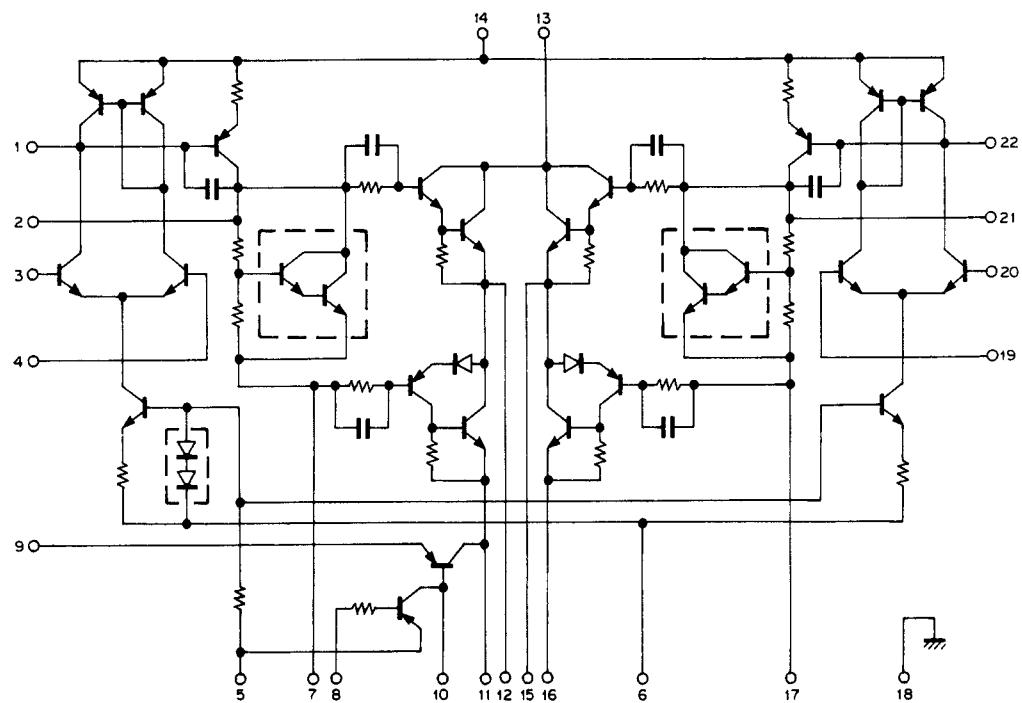
### 3. STK4201/2 : Main amplifier (X14-253X-XX : IC7) : K, P, U, UE, M, X Type

#### 3-1. Equivalent circuit



### 4. STK4201/5 : Main amplifier (X14-2532-71 : IC7) : E Type

#### 4-1. Equivalent circuit

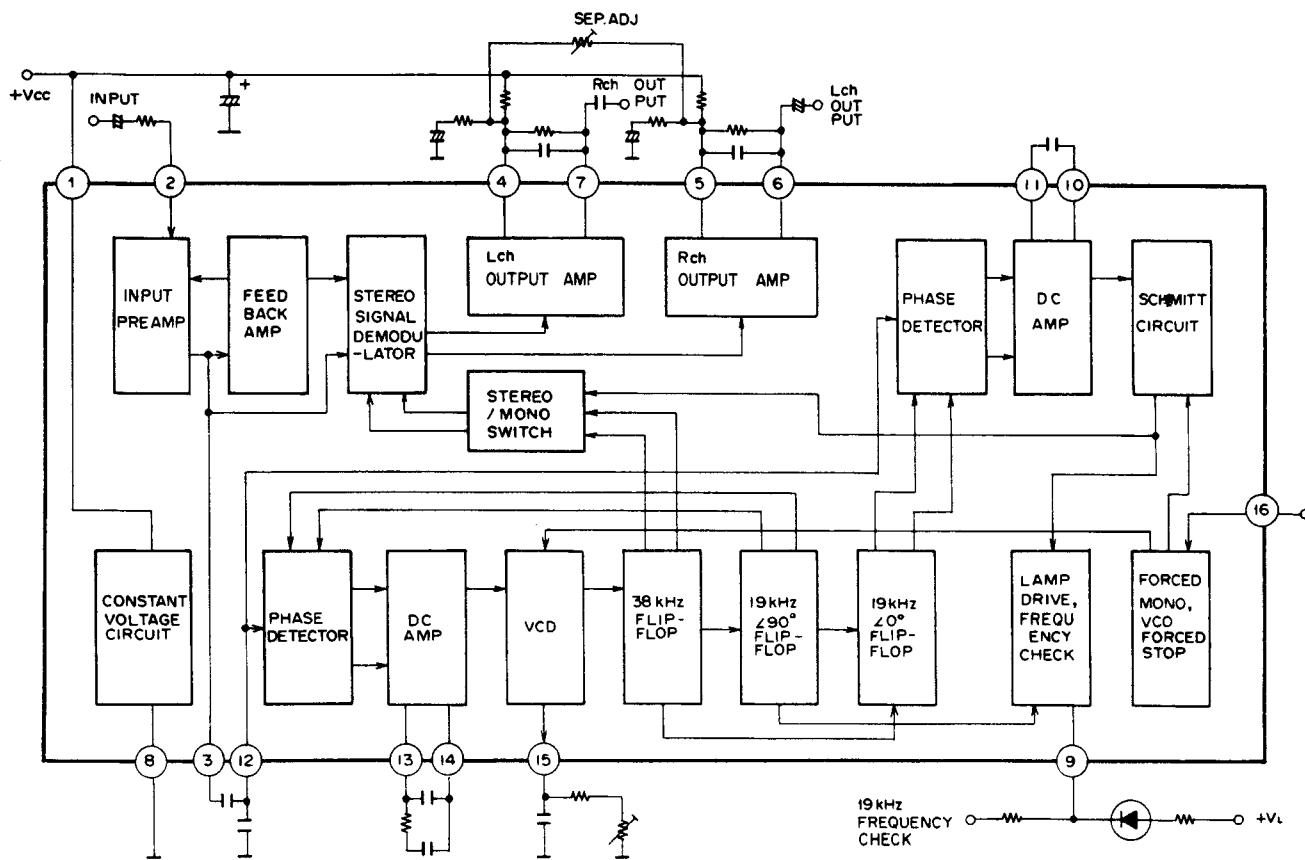


KR-A5010

## CIRCUIT DESCRIPTION

## 5. AN7470 : FM MPX (X14-253X-XX : IC3)

## 5-1. Equivalent block diagram



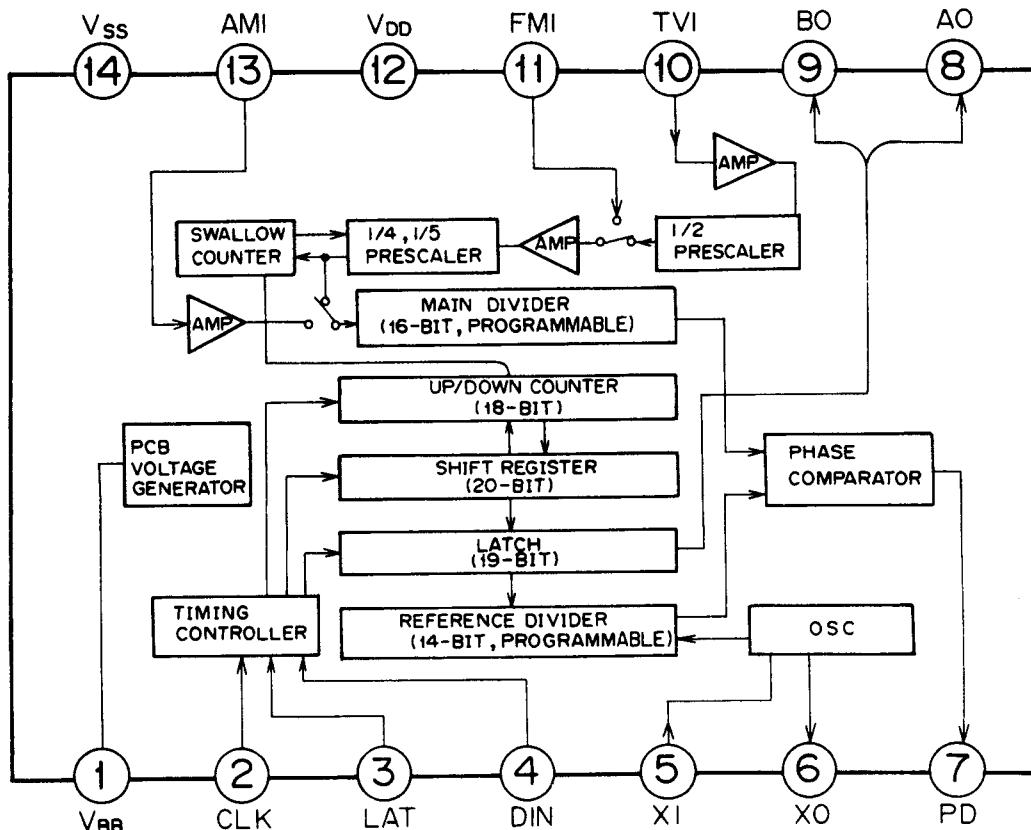
## 5-2. Terminal connection and functions

Terminal No.	Connection/Function
1	Supply voltage (+Vcc)
2	Stereo composite signal, input terminal
3	Input preamp, output terminal
4	L CH output amp, feedback terminal
5	R CH output amp, feedback terminal
6	R CH output amp, output terminal
7	L CH output amp, output terminal
8	Grounding terminal
9	Stereo display lamp drive and 19 kHz frequency check terminal
10	Stereo signal detector circuit, low-pass filter terminal
11	Stereo signal detector circuit, low-pass filter terminal
12	PLL circuit, input terminal
13	PLL circuit, low-pass filter terminal
14	PLL circuit, low-pass filter terminal
15	VCO freerun oscillation frequency adjustment terminal
16	Forced mono/forced VCO oscillation stop terminal

## CIRCUIT DESCRIPTION

## 6. CX7925B : PLL (X14-253X-XX : IC2)

## 6-1. Block diagram and terminal configuration diagram



## 6-2. Terminal description

Terminal No.	Symbol	Terminal Description
1	V <sub>BB</sub>	PCB terminal (Connect a 0.01 $\mu$ F capacitor between the GND).
2	CLK	Input terminal for the clock used for 20-bit serial data input (Shifted at the rise).
3	LAT	Input terminal for the shift register input data latch signal (shifted at the rise) and, at the same time, for the Up/Down clock (status changed at the rise).
4	DIN	Data input terminal, also the Up/Down mode switching terminal (Up mode with "H" level, Down mode with "L" level).
5	XI	Connection terminals for the reference signal generator X'tal oscillator. (Max. 13 MHz, standard 4.0 MHz)
6	XO	Phase comparator output terminal (3-state).
7	PD	External control signal output terminal/Unlock signal output terminal (E/E MOS push-pull).
8	AO	External control signal output terminal/data check terminal (E/E MOS push-pull).
9	BO	High-frequency signal input terminal (300 MHz or 350 MHz max.). With 1/2 prescaler.
10	TVI	High-frequency signal input terminal (150 MHz or 180 MHz max.).
11	FMI	Power supply (+5V).
12	V <sub>DD</sub>	High-frequency signal input terminal (40 MHz or 50 MHz max.).
13	AMI	Grouding terminal
14	V <sub>SS</sub>	

# KR-A5010

## ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
<b>FM SECTION</b> Unless otherwise specified, the individual switches should be set as following: SELECTOR: FM MODE: FM MODE/AUTO							
1	BAND EDGE (1)	—	Connect a DC voltmeter between TP 6 (VT) and TP 5 (GND).	87.5MHz	L7 (Front end)	2.5V	(a)
2	BAND EDGE (2)	—	Connect a DC voltmeter between TP 6 (VT) and TP 5 (GND).	108.0MHz	TC1 (Front end)	8.0V	(a)
Repeat alignments 1 and 2 several times.							
3	RF ALIGNMENT	(A) 98.0MHz 1kHz, $\pm 75$ kHz dev	(B)	MONO 98.0MHz	L 2-4 (Front end)	Maximum amplitude and symmetry of the oscilloscope display.	
4	DISCRIMINATOR	(A) 98.0MHz 1kHz, $\pm 75$ kHz dev 60dB $\mu$ (ANT input)	Connect a DC voltmeter between TP 3 and TP 4.	MONO 98.0MHz	L 14	0V	(b)
5	VCO	(A) 98.0MHz 0 dev 60dB $\mu$ (ANT input)	Connect a 330k $\Omega$ resistor to TP 1. Connect a frequency counter to the resistor via an AC voltmeter.	98.0MHz	VR 3	76.00kHz	(c)
6	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, $\pm 68.25$ kHz dev Selector:L or R 60dB $\mu$ (ANT input)	(B)	98.0MHz	L 8 (Front end)	Minimum distortion. (L or R)	
7	SEPARATION	(C) 98.0MHz 1kHz, $\pm 68.25$ kHz dev Selector:L or R Pilot: $\pm 6.75$ kHz dev 60dB $\mu$ (ANT input)	(B)	98.0MHz	VR 4	Minimum crosstalk. A compromise adjustment may be required if left-to-right and right-to-left separations are unequal.	
8	TUNING LEVEL	(A) 98.0MHz 0 dev 18dB $\mu$ (ANT input)	—	98.0MHz	VR 1	Adjust VR 1 so that FL1(TUNED) goes off. Then, adjust VR 1 and stop at the point where FL1(TUNED) goes on.	
<b>AM SECTION</b> Keep the AM loop antenna installed. SELECTOR: AM							
(1)	BAND EDGE (1)	—	Connect a DC voltmeter between TP 6 (VT) and TP 5 (GND).	530kHz (531kHz)	L 11	1.5V	(a)
(2)	BAND EDGE (2)	—	Connect a DC voltmeter between TP 6 (VT) and TP 5 (GND).	1610kHz (1602kHz)	TC 3	8.0V	(a)
Repeat alignments (1) and (2) several times.							
(3)	RF ALIGNMENT (1)	(D) 630kHz 400Hz, 30% mod	(B)	630kHz	L 10	Maximum amplitude and symmetry of the oscilloscope display.	
(4)	RF ALIGNMENT (2)	(D) 1440kHz 400Hz, 30% mod	(B)	1440kHz	TC 2	Maximum amplitude and symmetry of the oscilloscope display.	
Repeat alignments (3) and (4) several times.							
(5)	TUNING LEVEL	(A) 1000(999)kHz 0 dev 26 dB $\mu$ (ANT input)	—	1000(999)kHz	VR 2	Adjust VR 2 so that FL1(TUNED) goes off. Then, adjust VR 4 and stop at the point where FL1(TUNED) goes on.	
(6)	IF TRANSFORMER	(D) 1000kHz 20dB $\mu$ (ANT input)	(B)	—	L 13 (X14)	Maximum amplitude and symmetry of the oscilloscope display.	

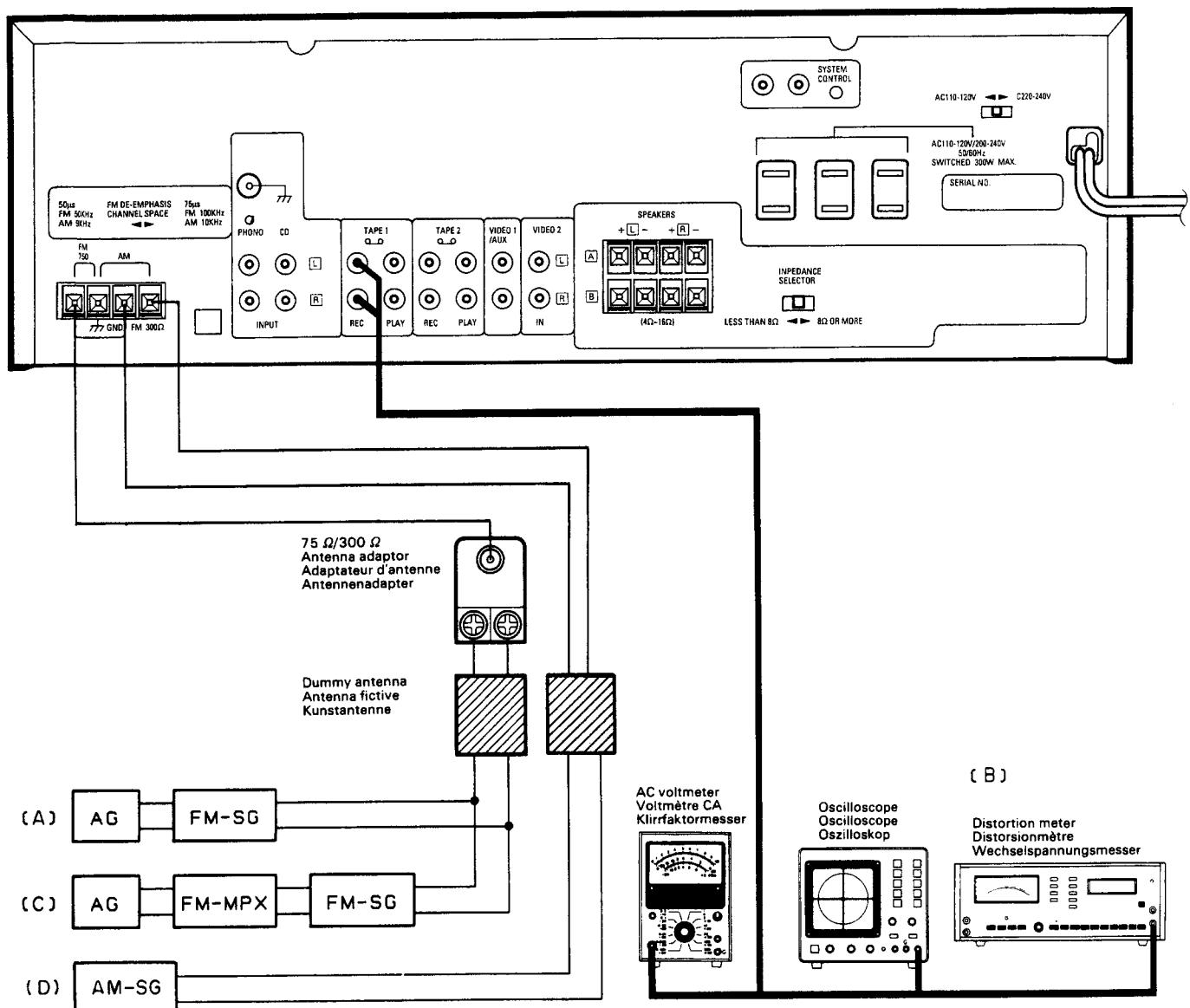
## REGLAGES

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
<b>SECTION MF</b> Sauf en cas d'indications spéciales, régler chaque commutateur comme suit: SELECTEUR: FM MODE: FM MODE/AUTO							
1	BORD DE BANDE (1)	—	Relier un voltmètre CC entre les TP 6 (VT) et TP 5 (GND).	87,5MHz	L7 (Contrôle)	2,5V	(a)
2	BORD DE BANDE (2)	—	Relier un voltmètre CC entre les TP 6 (VT) et TP 5 (GND).	108,0MHz	TC1 (Contrôle)	8,0V	(a)
Répéter les points 1 et 2 plusieurs fois.							
3	ALIGNEMENT HT	(A) 98,0MHz 1kHz.±75kHz dév	(B)	MONO 98,0MHz	L 2-4 (Contrôle)	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
4	DISCRIMINATEUR	(A) 98,0MHz 1kHz.±75kHz dév 60dB $\mu$ (Entrée ANT)	Relier un voltmètre CC entre les TP 3 et TP 4	MONO 98,0MHz	L 14	0V	(b)
5	VCO	(A) 98,0MHz 0 dév 60dB $\mu$ (Entrée ANT)	Relier une résistance de 330k $\Omega$ à TP1 Raccorder un compteur de fréquence à une résistance par l'intermédiaire d'un voltmètre CA.	98,0MHz	VR 3	76,00kHz	(c)
6	DISTORSION (STEREO)	(C) 98,0MHz 1kHz.±68,25kHz dév Selection:L ou R 60dB $\mu$ (Entrée ANT)	(B)	98,0MHz	L8 (Contrôle)	Distorsion minimale. (L ou R)	
7	SEPARATION	(C) 98,0MHz 1kHz.±68,25kHz dév Selection:L ou R Signal pilote: ±6,75kHz dév 60dB $\mu$ (Entrée ANT)	(B)	98,0MHz	VR 4	Diaphonie minimale. Un compromis de réglage peut être nécessaire si les séparation de gauche à droite et droite à gauche sont inégalées.	
8	NIVEAU D' ACCORDER	(A) 98,0MHz 0 dév 18dB $\mu$ (Entrée ANT)	—	98,0MHz	VR 1	Ajuster VR1 que FL1(TUNED) est non allumé. Alors, ajuster VR1 et arrêter le mouvement de VR1 au moment où le FL1(TUNED)s'allume.	
<b>SECTION MA</b> Laisser l'antenne bouche MA installée. SELECTEUR: AM							
(1)	BORD DE BANDE (1)	—	Relier un voltmètre CC entre les TP 6 (VT) et TP 5 (GND).	530kHz (531kHz)	L 11	1,5V	(a)
(2)	BORD DE BANDE (2)	—	Relier un voltmètre CC entre les TP 6 (VT) et TP 5 (GND).	1610kHz (1602kHz)	TC 3	8,0V	(a)
Répéter les points (1) et (2) plusieurs fois.							
(3)	ALIGNEMENT HT (1)	(D) 630kHz 400Hz.30% mod	(B)	630kHz	L 10	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
(4)	ALIGNEMENT HT (2)	(D) 1440kHz 400Hz.30% mod	(B)	1440kHz	TC 2	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
Répéter les points (3) et (4) plusieurs fois.							
(5)	NIVEAU D' ACCORDER	(A) 1000(999)kHz 0 dév 26 dB $\mu$ (Entrée ANT)	—	1000(999)kHz	VR 2	Ajuster VR 2 que FL1(TUNED) est non allumé. Alors, ajuster VR4 et arrêter le mouvement de VR4 au moment où le FL1(TUNED)s'allume.	
(6)	TRANSFORMATEUR F. I.	(D) 1000KHZ 20dB $\mu$ (Entrée ANT)	(B)	—	L13 (X14)	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	

## ABGLEICH

NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	TUNER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
UKW-EMPFANGSABTEILUNG Außer wenn anders angegeben, die verschiedenen Schalter wie folgt einstellen: SELECTOR: FM MODE:FM MODE/AUTO							
1	BANDKANTE (1)	—	Einen Gleichspannungsmesser zwischen TP 6 (VT) und TP 5 (GND) anschließen.	87,5MHz	L7 (Eingangs-stufe)	2,5V	(a)
2	BANDKANTE (2)	—	Einen Gleichspannungsmesser zwischen TP 6 (VT) und TP 5 (GND) anschließen.	108,0MHz	TC1 (Eingangs-stufe)	8,0V	(a)
Abstimmungen 1 und 2 mehrere Male wiederholen.							
3	EMPFANGS-BEREICH-ABSTIMMUNGEN	(A) 98,0MHz 1kHz.±75kHz Hub	(B)	MONO 98,0MHz	L 2-4 (Eingangs-stufe)	Maximal Amplitude und Symmetrie des Oszilloskopbildes.	
4	DISKRIMINATOR	(A) 98,0MHz 1kHz.±75kHz Hub 60dB $\mu$ (ANT-Eingang)	Einen Gleichspannungsmesser zwischen TP 3 und TP 4 anschließen.	MONO 98,0MHz	L 14	0V	(b)
5	SPANNUNGS-GEREGELTER OSZILLATOR	(A) 98,0MHz 0 Hub 60dB $\mu$ (ANT-Eingang)	Einen 330k $\Omega$ Widerstand zu TP1 anschließen. Einen Frequenzzähler über einen Wechselspannungsmesser an den Widerstand anschließen.	98,0MHz	VR 3	76,00kHz	(c)
6	KLIRRFAKTOR (STEREO)	(C) 98,0MHz 1kHz.±68,25kHz Hub Wähler: L oder R 60dB $\mu$ (ANT-Eingang)	(B)	98,0MHz	L8 (Eingangs-stufe)	Minimal Klirrfaktor. (L oder R)	
7	STEREO KANAL TRENNUNG	(C) 98,0MHz 1kHz.±68,25kHz Hub Wähler: L oder R Piloten: ±6,75kHz Hub 60dB $\mu$ (ANT-Eingang)	(B)	98,0MHz	VR 4	Minimales übersprechen. Eine Ausgleich-regelung kann notwendig sein. falls links-zu-rechts und rechts-zu-links. Trennungen ungleich sind.	
8	ABSTIMM PEGEL	(A) 98,0MHz 0 Hub 18dB $\mu$ (ANT-Eingang)	—	98,0MHz	VR1	Den Pegel widerstand VR1 so einstellen, daß der PL1(TUNED)anzeiger nicht leuchtet. Dann der Pegel widerstand aufdrehen. und dem VR1 Halt geben wobei den PL1(TUNED) anzeiger leuchtet wird.	
MW-EMPFANGSABTEILUNG Die MW Rahmenantenne angebracht lassen. SELECTOR: AM							
(1)	BANDKANTE (1)	—	Einen Gleichspannungsmesser zwischen TP 6 (VT) und TP 5 (GND) anschließen.	530kHz (531kHz)	L 11	1,5V	(a)
(2)	BANDKANTE (2)	—	Einen Gleichspannungsmesser zwischen TP 6 (VT) und TP 5 (GND) anschließen.	1610kHz (1602kHz)	TC 3	8,0V	(a)
Abstimmungen (1) und (2) mehrere Male wiederholen.							
(3)	HF-ABGLEICH (1)	(D) 630kHz 400Hz, 30% mod	(B)	630kHz	L 10	Maximal Amplitude und Symmetrie des Oszilloskopbildes.	
(4)	HF-ABGLEICH (2)	(D) 1440kHz 400Hz, 30% mod	(B)	1440kHz	TC 2	Maximal Amplitude und Symmetrie des Oszilloskopbildes.	
Abstimmungen (3) und (4) mehrere Male wiederholen.							
(5)	ABSTIMM PEGEL	(A) 1000(999)kHz 0 Hub 26 dB $\mu$ (ANT-Eingang)	—	1000(999)kHz	VR 2	Den Pegel widerstand VR 2 so einstellen, daß der PL1(TUNED)anzeiger nicht leuchtet. Dann der Pegel widerstand aufdrehen. und dem VR2 Halt geben wobei den PL1(TUNED) anzeiger leuchtet wird.	
(6)	ZF-ÜBERTRÄGER	(D) 1000kHz 20dB $\mu$ (ANT-Eingang)	(B)	—	L13 (X14)	Maximal Amplitude und Symmetrie des Oszilloskopbildes.	

## ADJUSTMENT/REGLAGE/ABGIEICH



## VOLTAGE TABLE

### X13-619X-XX

**IC1**

4	11.9V
11	-12.4V

**IC2**

4	11.9V
11	-12.4V

**IC3**

4	11.9V
11	-12.4V

**IC4**

1	5.6V
2	0V
3	5.6V

**IC6**

1	0V
2	UP5V
5	UP3.2V
6	DOWN3.2V
10	DOWN5V

	B	C	E
Q1	0V	4.8V	-
Q2	-24.6V	4.9V	-24.7V
Q4	0.6V	9.8V	0.2V
Q5	2.1V	0.2V	0V
Q6	45.6V	-28.4V	5.6V
Q11	6.2V	12.7V	5.7V
Q12	-30.6V	-48V	-
Q13	0V	0.3V	0V

**IC5**

32	0V
57	-30V
58	5V
64	5V

**IC9**

4	-12.4V
8	11.4V

### X14-253X-XX

**IC1**

1	2.4V
2	2.4V
3	2.4V
4	0V
5	9.9V
6	9.9V
7	9.9V
8	4.2V
9	3.8V
10	3.3V
11	1.4V
12	1.5V
13	0V
14	0V
15	2.4V
16	1.4V
17	0V
18	0V
19	0V
20	3.9V
21	3.9V
22	2.8V

**IC3**

1	11.3V
2	2.5V
3	6V
4	9.2V
5	9.2V
6	3.8V
7	3.6V
9	11.2V
10	2.6V
11	2.6V
12	2.6V
13	2.6V
14	2.6V
15	4.4V
16	4.1V

**IC7**

1	48.2V
2	0V
3	-0.3V
4	-0.3V
5	0V
6	0V
7	-1.3V
8	46.5V
9	-40.6V
10	-45.4V
11	-50.5V
12	0V
13	50.5V
14	49.7V
15	0V
16	-50.5V
17	-1.3V
18	0V
19	-0.3V
20	0.3V
21	1.2V
22	48.2V

	B	C	E
Q2	0V	9.7V	-
Q3	4.5V	9.5V	3.8V
Q4	0.6V	-	-
Q6	2.6V	9.3V	1.8V
Q7	1.2V	2.5V	0.6V
Q8	0.6V	2.5V	-
Q10	50 $\mu$ : 0.2V	50 $\mu$ : 0.3V	50 $\mu$ : 0.3V
	75 $\mu$ : 0.6V	75 $\mu$ : 0V	75 $\mu$ : 0V
Q11	50 $\mu$ : 0.2V	50 $\mu$ : 0V	50 $\mu$ : 0V
	75 $\mu$ : 0.6V	75 $\mu$ : 0V	75 $\mu$ : 0V
Q12	3.7V	0V	-
Q13	0V	11.8V	11.9V
Q14	0V	11.9V	-
Q15	11.9V	0.07V	11.9V
Q17	-12.2V	0V	0V
Q18	-12.2V	0V	0V
Q19	4.9V	-	3.6V
Q20	-	0V	-0.4V
Q21	0V	0V	-0.4V
Q22	4.9V	-0.4V	3.6V
Q25	0V	-23V	-7.0V
Q26	-	8V	-48.7V
Q27	-	8V	-48.7
Q29	-6V	-13V	0V
Q30	-13V	-42.4V	-12.4V
Q31	-42.4V	-12.4V	-43V

**IC8**

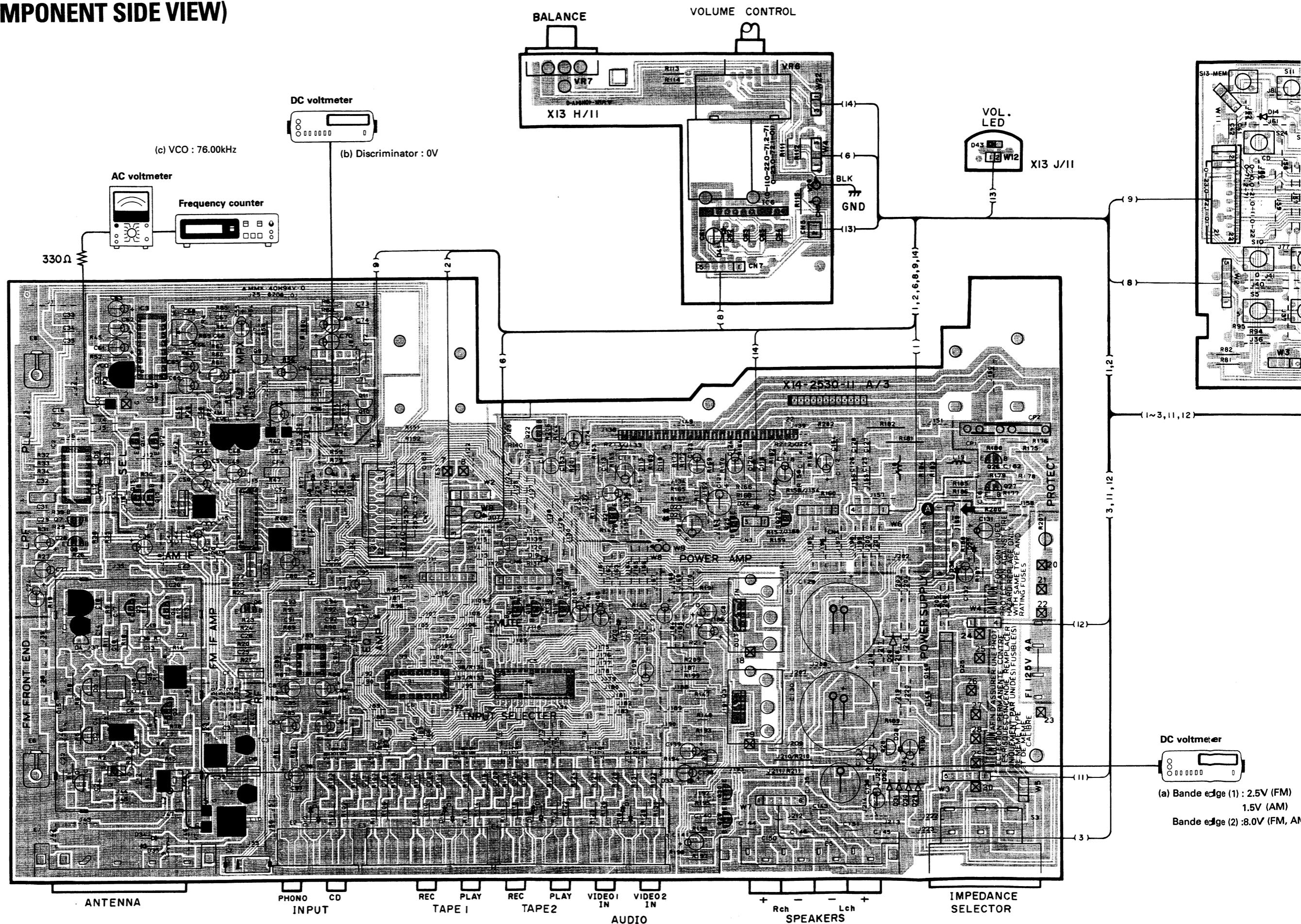
O	11.9V
I	21.8V
G	-
18	6.8V

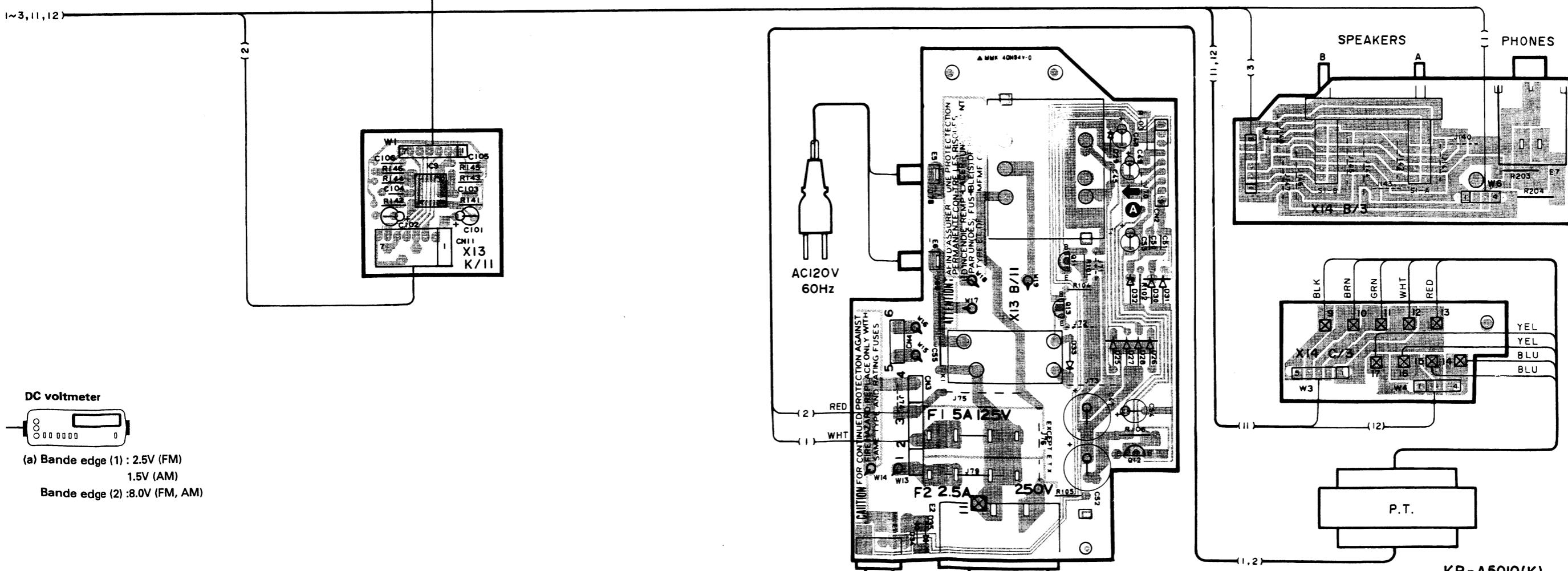
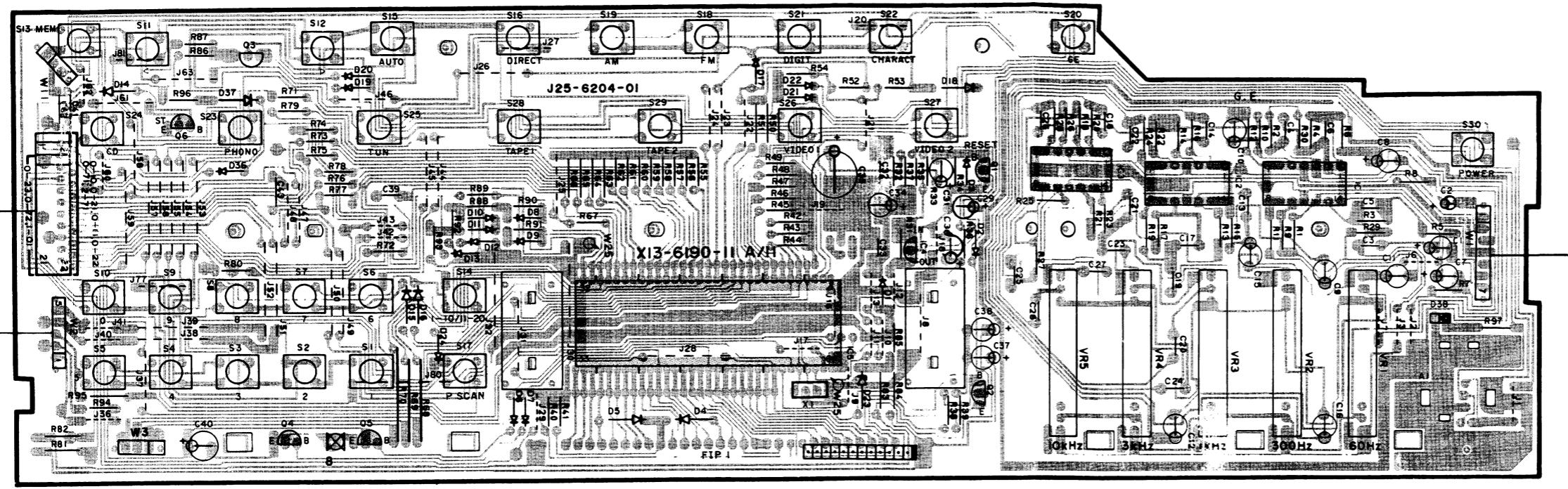
	G	D	S
Q1	-	9.7V	-
Q5	5.8V	-	-

**IC6**

1	0V
2	0V
8	-12.4V
16	11.9V

## PC BOARD (COMPONENT SIDE VIEW)

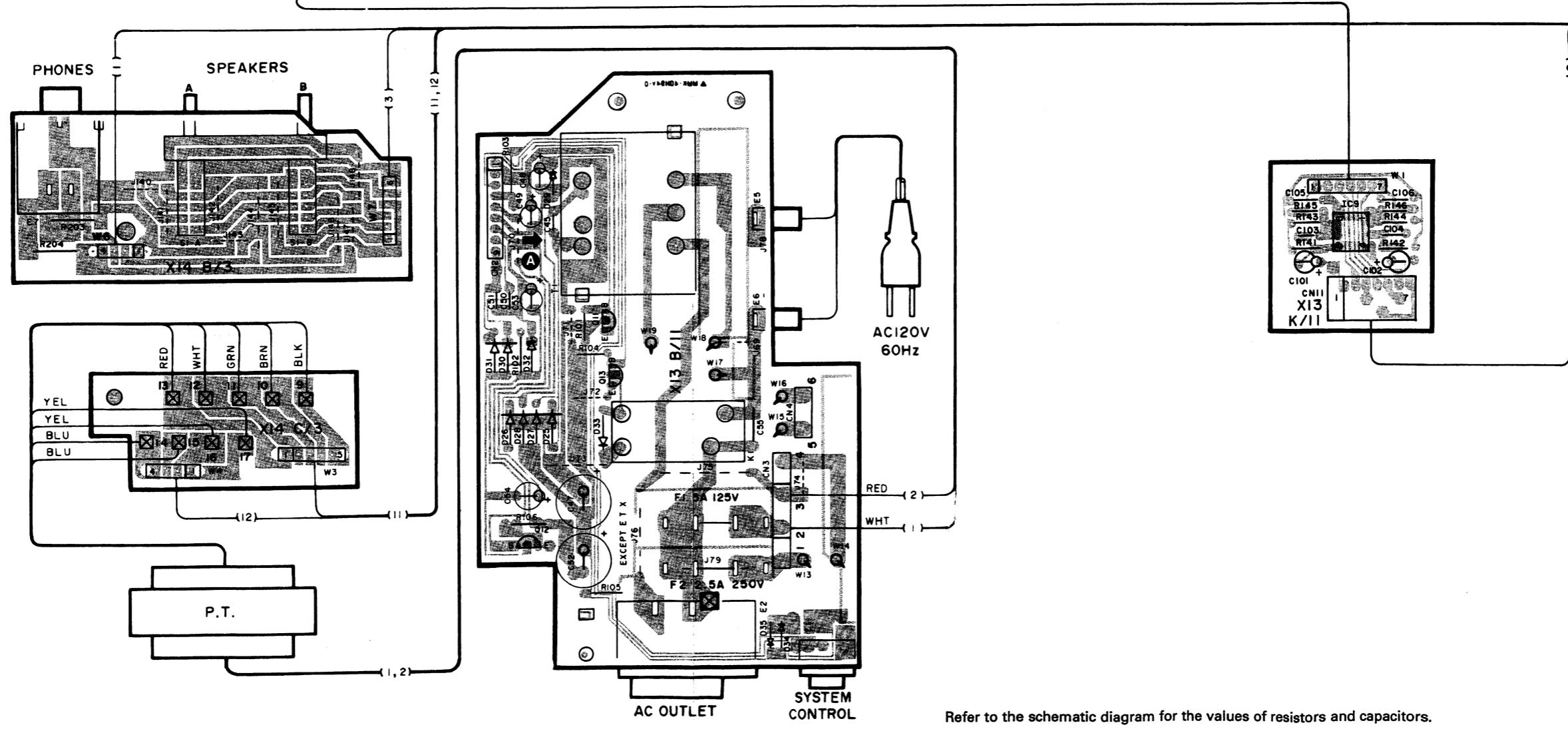
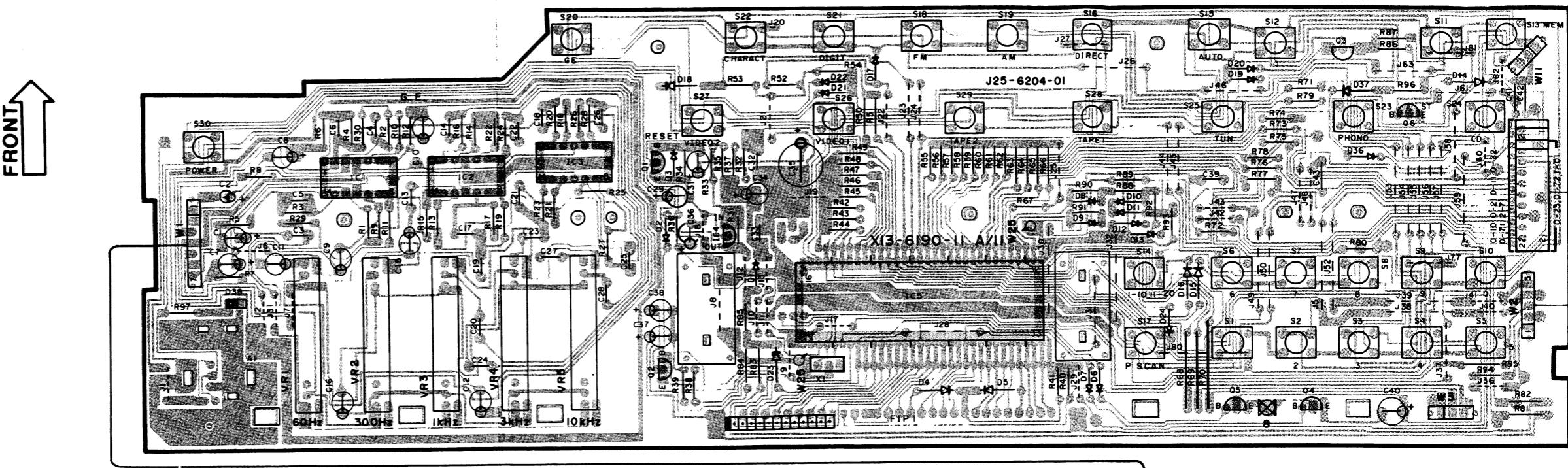




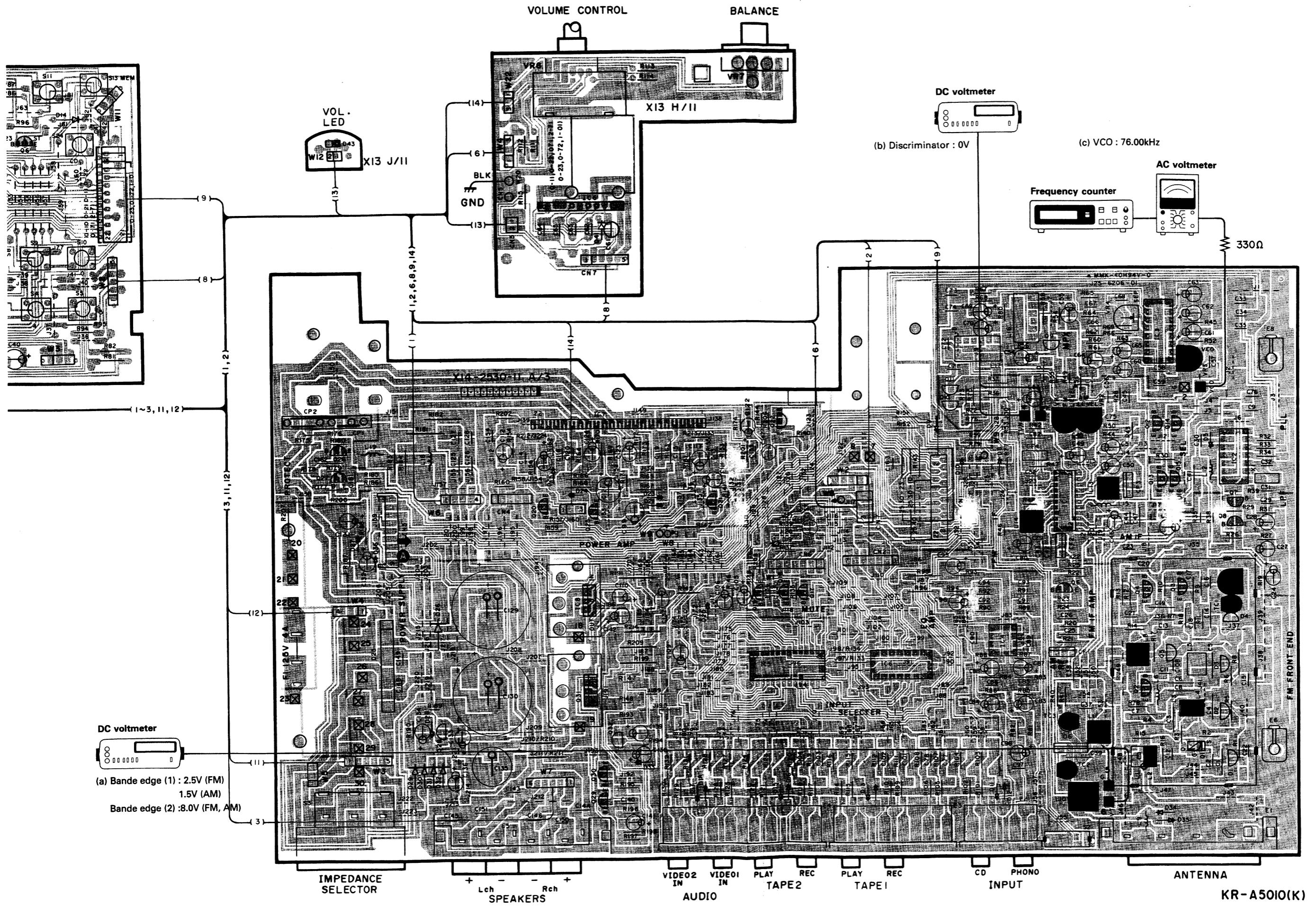
Refer to the schematic diagram for the values of resistors and capacitors.

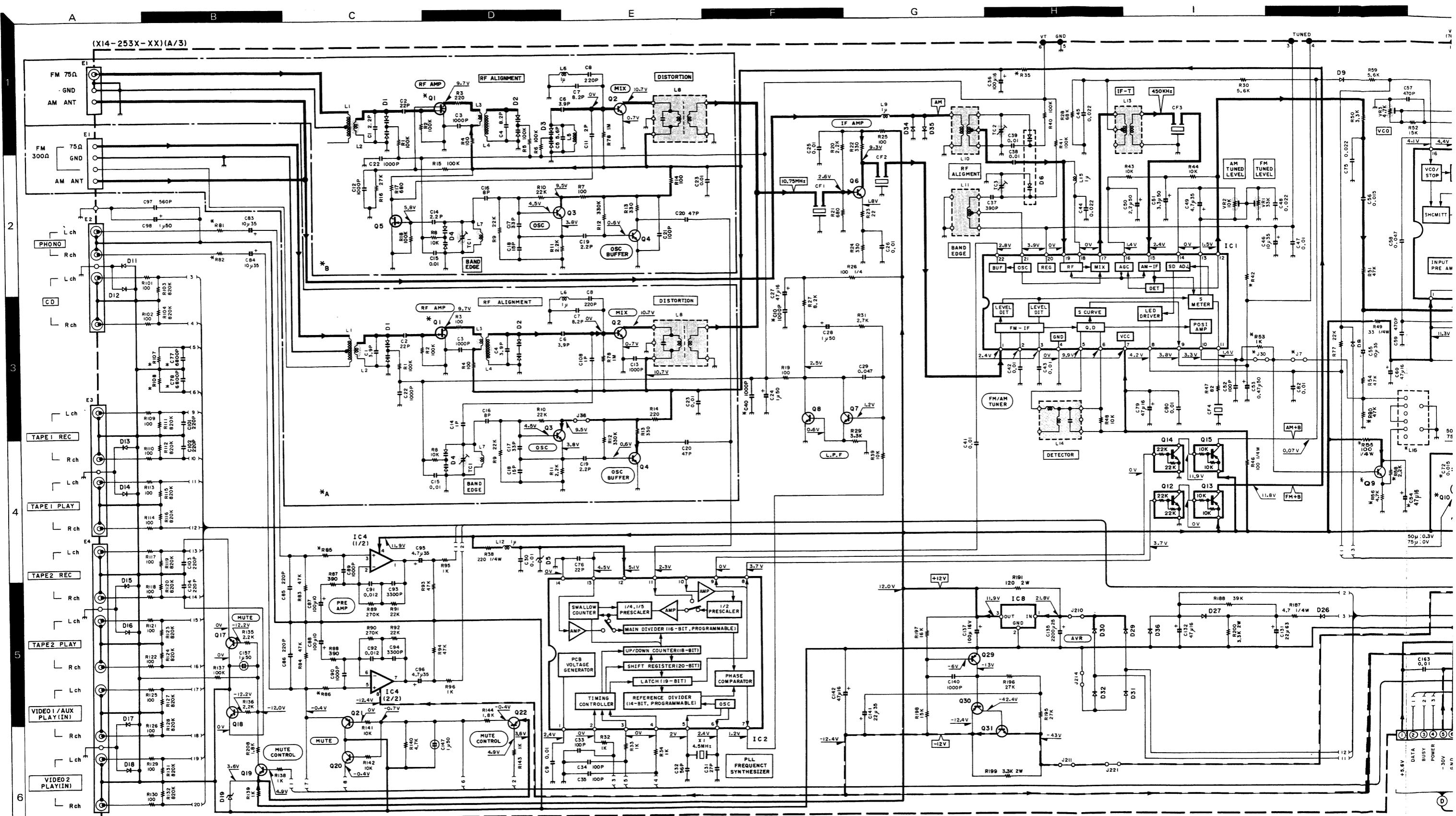
## SYSTEM CONTROL

## PC BOARD (FOIL SIDE VIEW)

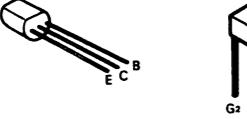


Refer to the schematic diagram for the values of resistors and capacitors.





2SA733(A)  
2SA992  
2SC1845  
2SC1923  
2SC2003  
2SC2878  
2SC945(A)



SK73

SK161  
SK241



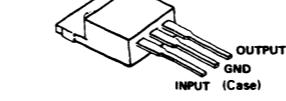
DTC13



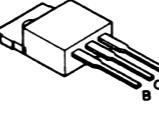
2



ES  
IS



2SD12



M5218P

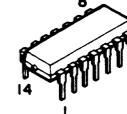


NJM4558 D-A

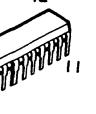
AN7470  
TC9215P

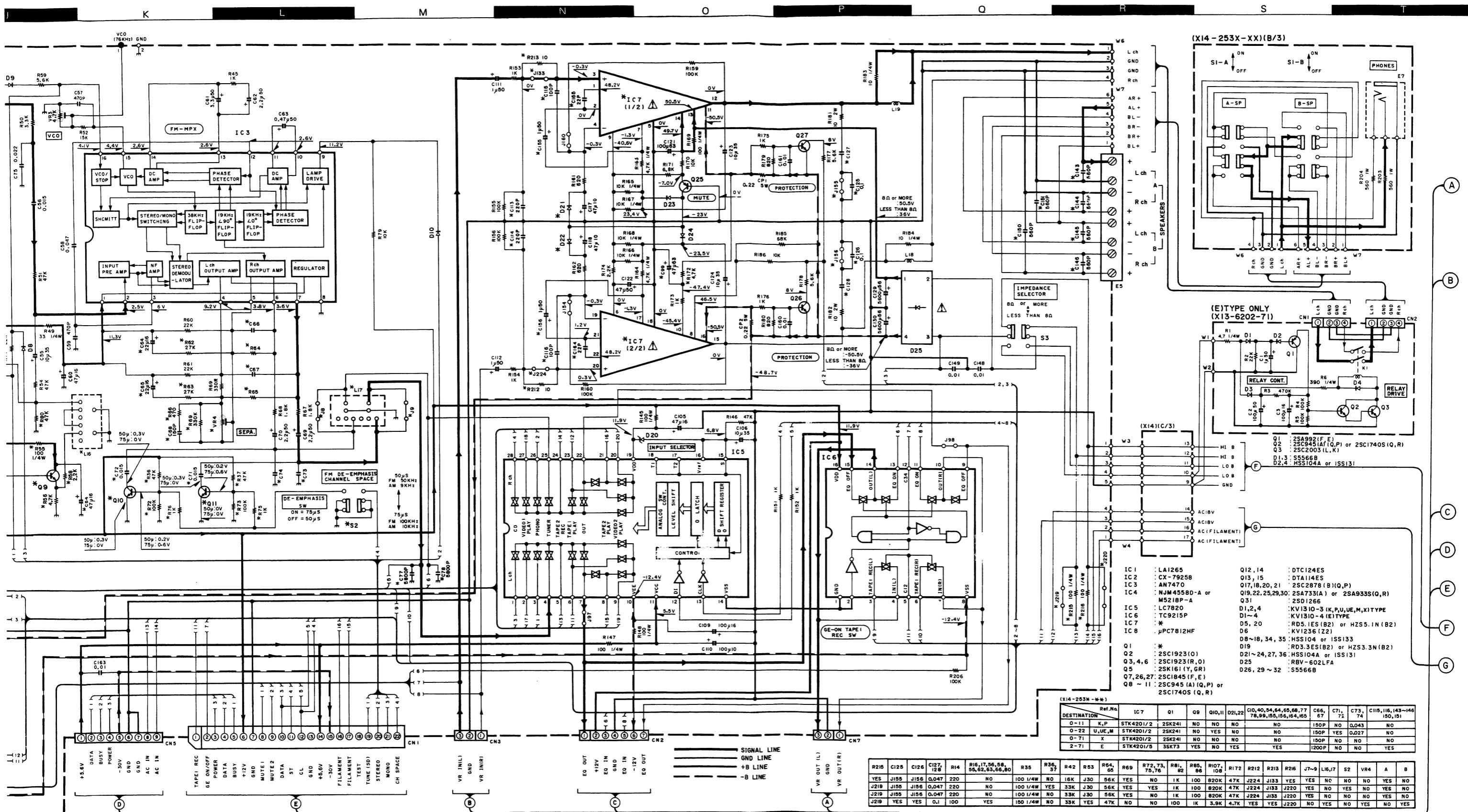


CX-7925

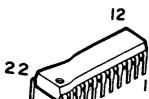


LA1265

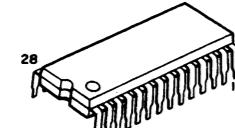




LA1265



LC7820

STK4201/2  
STK4201/5

**CAUTION :** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

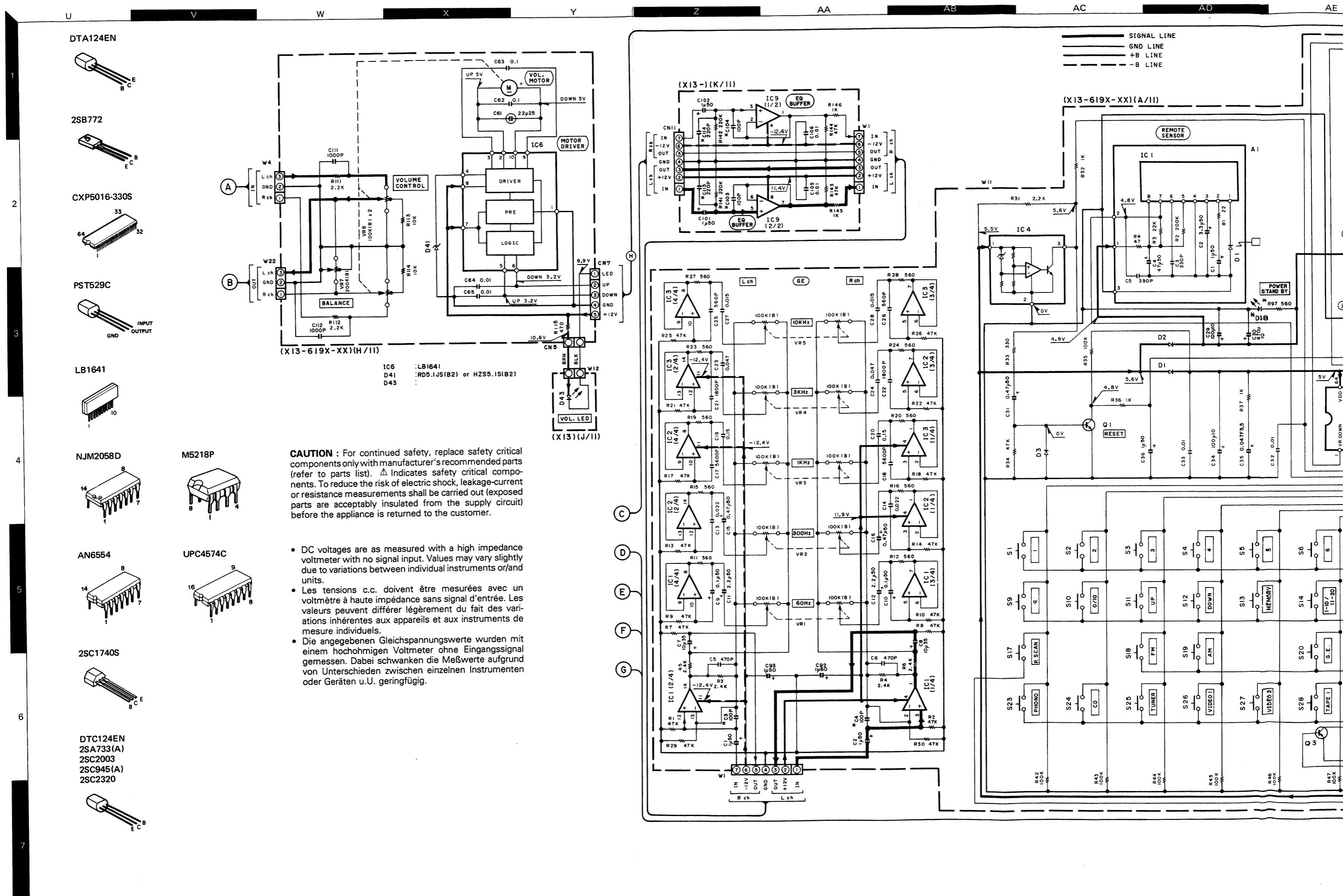
- DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

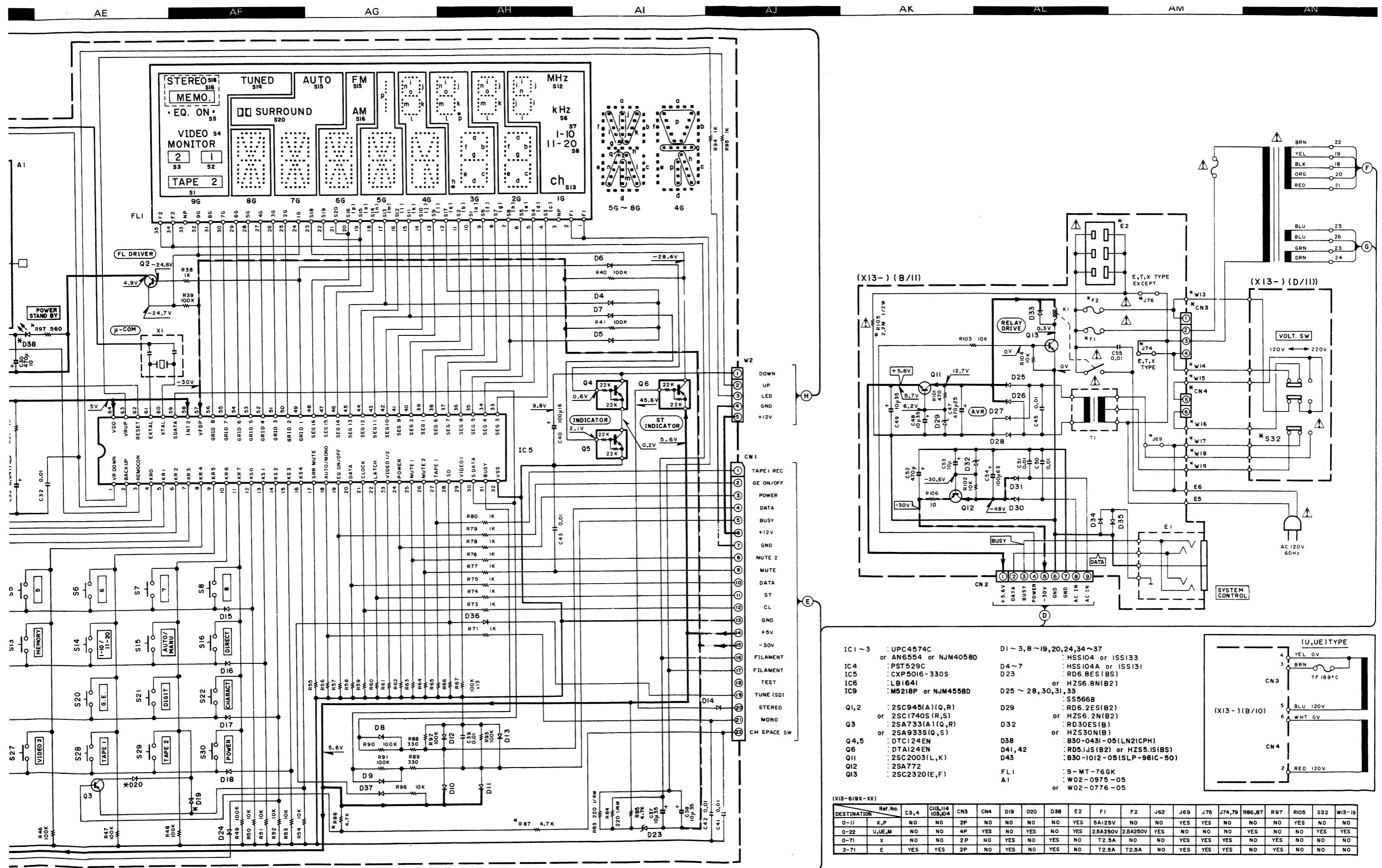
- Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

• Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Voltmeter ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

**KR-A5010**  
KENWOOD

Y05-2420-10

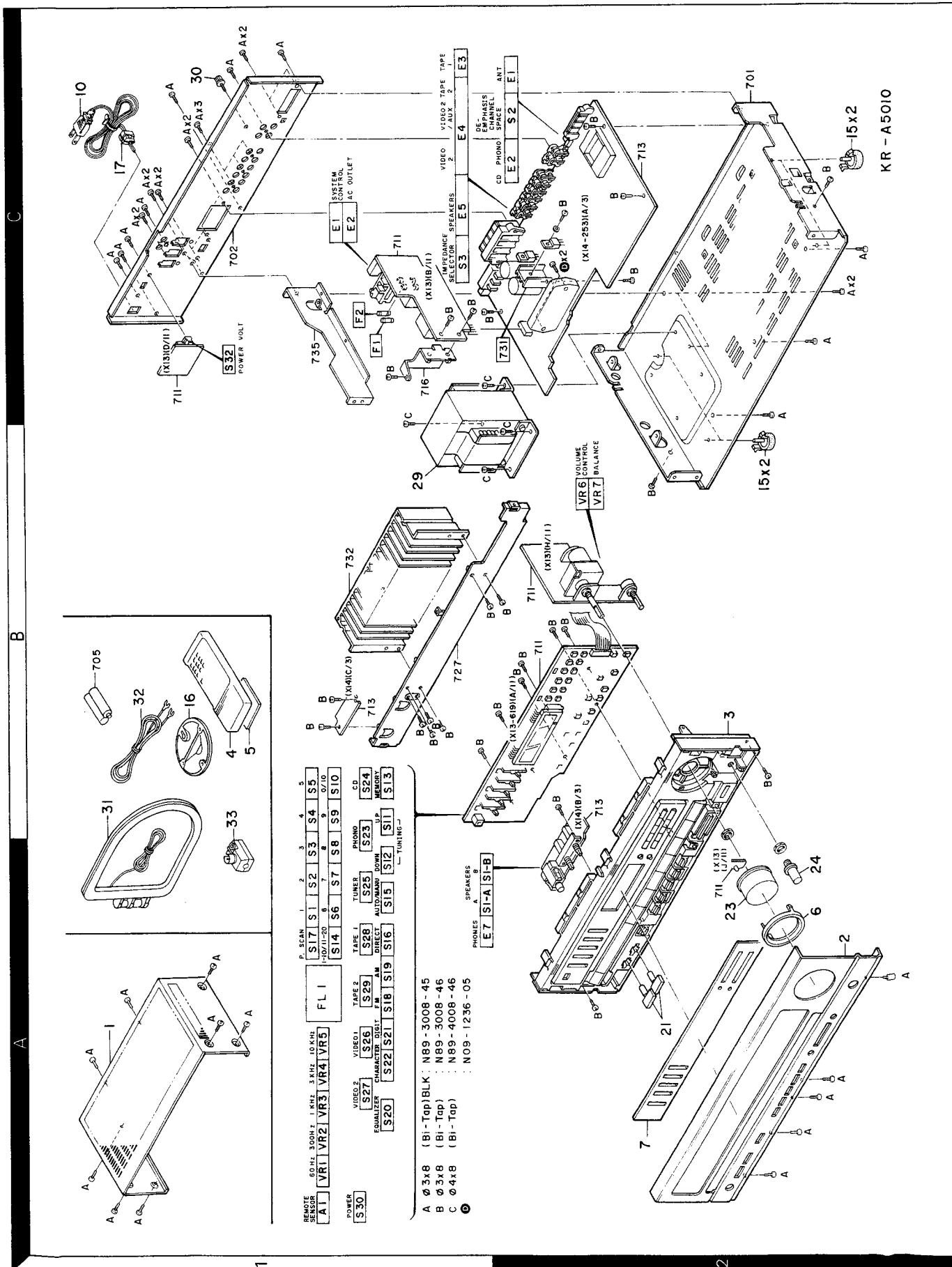




**KR-A5010**  
KENWOOD

Y05-2420-10

## EXPLODED VIEW



**Parts with the exploded numbers larger than 700 are not supplied.**

## PARTS LIST

Parts without Parts No. are not supplied.

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Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
<b>KR-A5010</b>						
1	1A		A01-1746-01	METALLIC CABINET		
2	2A	*	A20-5773-12	PANEL	KPUUEM	
2	2A	*	A20-5773-12	PANEL	X	
2	2A		A20-5803-12	PANEL	E	
3	2B		A22-1084-01	SUB PANEL		
4	23		A70-0264-05	REMOTE CONTROLLER ASSY(RC6010)		
5	1B		A09-0087-08	BATTERY CASE		
6	2A		B07-1889-04	ESCUTCHEON		
7	2A		B10-1004-03	FRONT GLASS	KPUUEM	
7	2A	*	B10-1005-03	FRONT GLASS	X	
-			B46-0092-03	WARRANTY CARD	K	
-			346-0094-03	WARRANTY CARD	UUE	
-			B46-0095-03	WARRANTY CARD	UUE	
-			B46-0096-13	WARRANTY CARD	X	
-			B46-0121-03	WARRANTY CARD	P	
-			B46-0122-13	WARRANTY CARD	E	
-			B50-9486-00	INSTRUCTION MANUAL(ENG)	KPUUEM	
-		*	B50-9486-00	INSTRUCTION MANUAL(ENG)	X	
-		*	B50-9487-10	INSTRUCTION MANUAL(FRE)	PME	
-		*	B50-9488-00	INSTRUCTION MANUAL(G/D/I)	E	
-		*	B50-9489-10	INSTRUCTION MANUAL(SPANISH)	M	
-		*	B58-0223-04	CAUTION CARD (PRE-SET 120V)	U	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	UE	
-			B58-0803-13	CAUTION CARD	E	
▲ 10	1C		E30-0459-05	AC POWER CORD	E	
▲ 10	1C		E30-0812-05	AC POWER CORD	UUEM	
▲ 10	1C		E30-1341-05	AC POWER CORD	X	
▲ 10	1C		E30-2209-05	AC POWER CORD	KP	
-			E30-0977-05	CORD WITH PLUG(SYNCHRO)	E	
▲ E2	1C		E30-1392-05	CORD WITH PLUG(SYNCHRO)X2	E	
-			E03-0055-05	AC OUTLET	E	
-			H01-8449-04	ITEM CARTON CASE		
-			H10-3798-02	POLYSTYRENE FOAMED FIXTURE		
-			H10-3799-02	POLYSTYRENE FOAMED FIXTURE		
-			H25-0181-04	PROTECTION BAG (150X260X0.05)		
-			H25-0223-04	PROTECTION BAG (750X350X0.03)		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
15	23, 2C		J02-1013-05	FOOT	KPUUEM	
15	2B, 2C		J02-1013-05	FOOT	X	
15	23, 2C		J02-1034-05	FOOT	E	
16	1B		J19-2815-04	ANTENNA HOLDER		
▲ 17	1C		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
21	2A		K27-1987-04	KNOB (BUTTON) SPEAKERS		
23	2A		K29-3581-04	KNOB ASSY (VOLUME)		
24	2A		K29-3632-04	KNOB (BALANCE)		
▲ 29	1B		L01-6001-05	POWER TRANSFORMER	K	
▲ 29	1B		L01-6002-05	POWER TRANSFORMER	E	
▲ 29	1B		L01-6005-05	POWER TRANSFORMER	UUEM	
▲ 29	1B		L01-6007-05	POWER TRANSFORMER	P	

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Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
△ 29	1B		L01-6008-05	POWER TRANSFORMER	X	
30	1C		N08-0128-35	BINDING POST (GND)		
A			N89-3008-45	BINDING HEAD TAPTITE SCREW		
B			N89-3008-46	BINDING HEAD TAPTITE SCREW		
C			N89-4008-46	BINDING HEAD TAPTITE SCREW		
31	1D		T90-0174-05	LOOP ANTENNA		
32	1S		T90-0175-05	T TYPE ANTENNA		
33	1B		T90-0177-05	ANTENNA ADAPTER	E	
<b>SUB UNIT (X13-619X-XX) 0-11:K, P 0-22:U, UE, M 0-71:X 2-71:E</b>						
D38			B30-0431-05	LED(LN21CPH)	X	
D43			B30-1012-05	LED(SLP-981C-50)		
C1			CE04LW1H010M	ELECTRO	1.0UF	50WV
C2			CE04JW1H010M	ELECTRO	1.0UF	50WV
C3 , 4			CC45FSL1H101J	CERAMIC	100PF	J
C5 , 6			CK45FB1H471K	CERAMIC	470PF	K
C7 , 8			CE04LW1V100M	ELECTRO	10UF	35WV
C9 , 10		*	CE04LW1H101M	ELECTRO	0.10UF	50WV
C11 , 12			CE04LW1H2R2M	ELECTRO	2.2UF	50WV
C13 , 14			CF92FV1H223J	MF	0.022UF	J
C15 , 16			CE04LW1H474M	ELECTRO	0.47UF	50WV
C17 , 18			CF92FV1H562J	MF	5600PF	J
C19 , 20			CF92FV1H154J	MF	0.15UF	J
C21 , 22			CF92FV1H182J	MF	1800PF	J
C23 , 24			CF92FV1H473J	MF	0.047UF	J
C25 , 26			CK45FB1H561K	CERAMIC	560PF	K
C27 , 28			CF92FV1H153J	MF	0.015UF	J
C29		*	CE04JW1A101M	ELECTRO	100UF	10WV
C30		*	CE04LW1A471M	ELECTRO	470UF	10WV
C31			CE04LW1H474M	ELECTRO	0.47UF	50WV
C32 , 33			CK45FF1H103Z	CERAMIC	0.010UF	Z
C34			CE04LW1A101M	ELECTRO	100UF	10WV
C35			C91-0937-05	BACKUP	0.047F	5.5WV
C36			CE04LW1H010M	ELECTRO	1.0UF	50WV
C37 , 38			CE04LW1V100M	ELECTRO	10UF	35WV
C39			CK45FF1H103Z	CERAMIC	0.010UF	Z
C40			CE04LW1C101M	ELECTRO	100UF	16WV
C41 -43			C91-0769-05	CERAMIC	0.01UF	M
C45			CK45FF1H103Z	CERAMIC	0.010UF	Z
C47			CE04LW1E471M	ELECTRO	470UF	25WV
C48 , 49			CE04LW1V100M	ELECTRO	10UF	35WV
C50 , 51			CK45FF1H103Z	CERAMIC	0.010UF	Z
C52			CE04LW1H471M	ELECTRO	470UF	50WV
C53			CE04LW1H100M	ELECTRO	10UF	50WV
C54			CE04LW1J101M	ELECTRO	100UF	63WV
△ C55			C91-0023-05	CERAMIC	0.01UF	AC250V
△ C55			C91-0647-05	CERAMIC	0.01UF	UUEM KPXE
C61			C90-1353-05	NP-ELEC	10UF	25WV
C62 , 63			CF92FV1H104J	MF	0.10UF	J
C64 , 65			CK45FF1H103Z	CERAMIC	0.010UF	Z
C92 , 93			CE04LW1H010M	ELECTRO	1.0UF	50WV
C101,102			CE04LW1H010M	ELECTRO	1.0UF	50WV
C103,104			CC45FSL1H101J	CERAMIC	100PF	J
C105,106			C91-0769-05	CERAMIC	0.01UF	M
E: Scandinavia & Europe K: USA P: Canada U: PX(Far East, Hawaii) T: England M: Other Areas UE : AAFES(Europe) X: Australia						

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C107, 108			CK45PF1H103Z	CERAMIC 0.010UF Z		
C111, 112			CK45FB1H102K	CERAMIC 1000PF X	E	
C113, 114			CC445PSL1H221J			
△ E1	1C		E11-0188-05-	MINIATURE PHONE JACK (SYSTEM)		
△ E2	1C	*	E03-0107-05	AC OUTLET	KPUUEM	
△ F1	1C		F04-5022-05	FUSE (UL) (125V 5A)	KP	
△ F1	1C		F05-2525-05	FUSE (SEMKO) (250V T2.5A)	X	
△ F1 , 2	1C		F05-2525-05	FUSE (SEMKO) (250V T2.5A)	E	
△ F1 , 2	1C		F06-2526-05	FUSE (250V 2.5A)	UUEM	
-			J13-0054-05	FUSE CLIP		
△ T1			L01-7651-05	POWER TRANSFORMER	KP	
△ T1			L01-7652-05	POWER TRANSFORMER	E	
△ T1			L01-7653-05	POWER TRANSFORMER	UUEM	
△ T1			L01-7657-05	POWER TRANSFORMER	X	
X1			L78-0209-05	RESONATOR (4.194MHZ)		
R105			R92-0173-05	RC 2.2M M 1/2W	KP	
R106			RD14N32E100J	RD 10 J 1/4W		
VR1 -5	1A	*	R13-5087-05	POTENTIOMETER (EQ)		
VR6	2B		R29-5022-05	POTENTIOMETER VOLUME		
VR7	2B	*	R01-5066-05	POTENTIOMETER BALANCE		
K1			S51-1052-05	MAGNETIC RELAY		
S1 -30	1A		S40-1064-05	PUSH SWITCH (SELECTOR)		
△ S32	1C		S31-3010-05	SLIDE SWITCH (POWER VOLTAGE)	UUEM	
D1 -3			HSS104	DIODE		
D1 -3			1SS133	DIODE		
D4 -7			HSS104A	DIODE		
D4 -7			1SS131	DIODE		
D8 -18			HSS104	DIODE	KPUUEM	
D8 -18			1SS133	DIODE		
D8 -19			HSS104	DIODE	KPUUEM	
D8 -19			1SS133	DIODE	XE	
D20			HSS104	DIODE	XE	
D20			1SS133	DIODE	UUEM	
D23			HZS6.8N(B2)	ZENER DIODE		
D23			RD6.8ES(B2)	ZENER DIODE		
D24			HSS104	DIODE		
D24			1SS133	DIODE		
D25 -28			S5566B	DIODE		
D29			HZS6.2N(B2)	ZENER DIODE		
D29			RD6.2ES(B2)	ZENER DIODE		
D30 , 31			S5566B	DIODE		
D32			HZS30N(B)	ZENER DIODE		
D32			RD30ES(B)	ZENER DIODE		
D33			S5566B	DIODE		
D34 -37			HSS104	DIODE		
D34 -37			1SS133	DIODE		
D41			HZS5.1S(B2)	ZENER DIODE		
D41			RD5.1JS(B2)	ZENER DIODE		
PL1	1A		9-MT-76GK	FLUORESCENT INDICATOR TUBE		
IC1 -3			AN6554	IC(OP AMP X4)		
IC1 -3			NJM2058D	IC(OP AMP X4)		
IC1 -3			UPC4574C	IC(OP AMP X4)		
IC4			PST529C	IC(SYSTEM RESET)		

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IC5			CXP5U16-330S	IC(MICROPROCESSOR)		
IC6			LB1641	IC(MOTOR DRIVER)		
IC9			M5218P	IC(OP AMP X2)		
IC9			NJM4558D	IC(OP AMP ^2)		
Q1 , 2			2SC1740S(Q, R)	TRANSISTOR		
Q1 , 2			2SC945(A)(Q, P)	TRANSISTOR		
Q3			2SA733(A)(Q, P)	TRANSISTOR	<u>UE</u>	
Q3			2SA933S(Q, R)	TRANSISTOR	<u>UE</u>	
Q4 , 5			DTC124EN	DIGITAL TRANSISTOR		
Q6			DTA124EN	DIGITAL TRANSISTOR		
Q11			2SC2003(L, K)	TRANSISTOR		
Q12			2SB772	TRANSISTOR		
Q13			2SC2320(E, F)	TRANSISTOR		
A1	1A		W02-0776-05	REMOTE CONTROL SENSOR		
A1	1A		W02-0975-05	REMOTE CONTROL SENSOR		

## SUB UNIT (X13-6202-71) E type only

C1		CE04LW1H010M	ELECTRO	1.0UF	50V	E	
C2		CE04LW1H101M	ELECTRO	100UF	50V	E	
C3		CE04LW1C101M	ELECTRO	100UF	16V	E	
CN1 , 2		E10-C408-05	FLAT CABLE CONNECTOR			E	
R1		RD14GB2E4R7J	FL-PROOF RD	4.7	J 1/4W	E	
R6		RD14GB2E391J	FL-PROOF RD	390	J 1/4W	E	
K1		S51-2078-05	MAGNETIC RELAY			E	
D1		S5566B	DIODE			E	
D2		HSS104A	DIODE			E	
D2		1SS131	DIODE			E	
D3		S5566B	DIODE			E	
D4		HSS104A	DIODE			E	
D4		1SS131	DIODE			E	
Q1		2SA992(F, E)	TRANSISTOR			E	
Q2		2SC1740S(Q, R)	TRANSISTOR			E	
Q2		2SC945(A)(Q, P)	TRANSISTOR			E	
Q3		2SC2003(L, K)	TRANSISTOR			E	

## TUNER UNIT (X14-253X-XX) 0-11 : K, P 0-22 : U, UE, M 0-71 : X 2-71 : E

C1		C91-0713-05	CERAMIC	2.2PF	K	E	
C1		C91-0716-05	CERAMIC	3.9PF	K	KPUUE	
C1		C91-0716-05	CERAMIC	3.9PF	K	X	
C2		CC45FSL1H220J	CERAMIC	22PF	J		
C3		C91-0757-05	CERAMIC	1000PF	K		
C4		C91-0716-05	CERAMIC	3.9PF	K	KPUUE	
C4		C91-0716-05	CERAMIC	3.9PF	K	X	
C4		C91-0720-05	CERAMIC	8.2PF	K	E	
C5		C91-0718-05	CERAMIC	5.6PF	K	E	
C6		C91-0716-05	CERAMIC	3.9PF	K		
C7		C91-0720-05	CERAMIC	8.2PF	K		
C8		C91-0749-05	CERAMIC	220PF	K		
C9		CK45FB1H103Z	CERAMIC	0.010UF	Z		
C10		CK45FB1H102K	CERAMIC	1000PF	X	E	
C11		CC45FSL1H020C	CERAMIC	2.0PF	C	E	
C12		CK45FB1H102K	CERAMIC	1000PF	X	E	
C13		CK45FB1H102K	CERAMIC	1000PF	K	KPUUE	
C13		CK45FB1H102K	CERAMIC	1000PF	K	X	

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C14			C91-0709-05	CERAMIC	1PF	M	KPUUEM	
C14			C91-0709-05	CERAMIC	1PF	M	X	
C14			C91-0713-05	CERAMIC	2.2PF	K	E	
C15			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C16			CC45FJU1H080D	CERAMIC	8.0PF	D		
C17			C91-0733-05	CERAMIC	33PF	J		
C18			CC45FSL1H150J	CERAMIC	15PF	J		
C19			C91-0713-05	CERAMIC	2.2PF	K		
C20			C91-0737-05	CERAMIC	47PF	J		
C21			CC45FSL1H101J	CERAMIC	100PF	J	E	
C22			CK45FB1H102K	CERAMIC	1000PF	K		
C23			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C24			CE04LW1H010M	ELECTRO	1.0UF	50WV		
C25 , 26			C91-0769-05	CERAMIC	0.01UF	M		
C27			CE04LW1C470M	ELECTRO	47UF	16WV		
C28			CE04LW1H010M	ELECTRO	1.0UF	50WV		
C29			CF92FV1H473J	MF	0.047UF	J		
C30			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C31			CC45FCH1H270J	CERAMIC	27PF	J		
C32			CC45FCH1H560J	CERAMIC	56PF	J		
C33 -35			CC45FSL1H101J	CERAMIC	100PF	J		
C36			CE04LW1C101M	ELECTRO	100UF	16WV		
C37			CC93FCH1H391J	CERAMIC	390PF	J		
C38 , 39			C91-0769-05	CERAMIC	0.01UF	M		
C40			CK45FB1H102K	CERAMIC	1000PF	K	E	
C41 -43			C91-0769-05	CERAMIC	0.01UF	M		
C44 , 45			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C46			CE04LW1V100M	ELECTRO	10UF	35WV		
C47			C91-0769-05	CERAMIC	0.01UF	M		
C48			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C49			CE04LW1V4R7M	ELECTRO	4.7UF	35WV		
C50			CE04LW1H2R2M	ELECTRO	2.2UF	50WV		
C51			CE04LW1H3R3M	ELECTRO	3.3UF	50WV		
C52			CC45FSL1H101J	CERAMIC	100PF	J		
C53			CE04LW1HR47M	ELECTRO	0.47UF	50WV		
C54			CE04LW1C470M	ELECTRO	47UF	16WV	E	
C55			CE04LW1V100M	ELECTRO	10UF	35WV		
C56			CF92FV1H153J	MF	0.015UF	J		
C57			CC93FCH1H471J	CERAMIC	470PF	J		
C58			CF92FV1H473J	MF	0.047UF	J		
C59			CK45FB1H471K	CERAMIC	470PF	K		
C60			CE04LW1C470M	ELECTRO	47UF	16WV		
C61			CE04LW1H3R3M	ELECTRO	3.3UF	50WV		
C62			CE04LW1H2R2M	ELECTRO	2.2UF	50WV		
C63			CE04LW1HR47M	ELECTRO	0.47UF	50WV		
C64 , 65			CE04LW1C220M	ELECTRO	22UF	16WV	E	
C66 , 67			CC45FSL1H151J	CERAMIC	150PF	J	KPUUEM	
C66 , 67			CC45FSL1H151J	CERAMIC	150PF	J	X	
C66 , 67			CF92FV1H122J	MF	1200PF	J	E	
C68			CC45FSL1H151J	CERAMIC	150PF	J	E	
C69 , 70			CE04LW1H2R2M	ELECTRO	2.2UF	50WV		
C71 , 72			CF92FV1H153J	MF	0.015UF	J	UE	
C73 , 74			CF92FV1H273J	MF	0.027UF	J	UEMX	
C73 , 74			CF92FV1H433J	MF	0.043UF	J	KP	
C75			CK45FF1H223Z	CERAMIC	0.022UF	Z		

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C76			CC45FSL1H220J	CERAMIC	22PF	J		
C77 ,78			CF92FV1H682J	MF	6800PF	J	E	
C79			CE04LW1C470M	ELECTRQ	47UF	16WV		
C80			C91-0769-05	CERAMIC	0.01UF	M		
C82			C91-0769-05	CERAMIC	0.01UF	M		
C83 ,84			CE04LW1V100M	ELECTRQ	10UF	35WV		
C85 ,86			CC45FSL1H221J	CERAMIC	220PF	J		
C87 ,88			CE04LW1A101M	ELECTRQ	100UF	10WV		
C89 ,90			CK45FB1H102K	CERAMIC	1000PF	K		
C91 ,92			CF92FV1H123J	MF	0.012UF	J		
C93 ,94			CF92FV1H332J	MF	3300PF	J		
C95 ,96			CE04LW1V4R7M	ELECTRQ	4.7UF	35WV		
C97			CK45FB1H561K	CERAMIC	560PF	K		
C98			CE04LW1H010M	ELECTRQ	1.0UF	50WV		
C99			CE04LW1J221M	ELECTRQ	220UF	63WV	KPUUEM	
C99			CE04LW1J221M	ELECTRQ	47UF	63WV	X	
C101-104			CC45FSL1H221J	CERAMIC	220PF	J		
C105			CE04LW1C470M	ELECTRQ	47UF	16WV		
C106			CE04LW1V100M	ELECTRQ	10UF	35WV		
C108			C91-0709-05	CERAMIC	1PF	M	KPUUEM	
C108			C91-0709-05	CERAMIC	1PF	M	X	
C109			CE04LW1C101M	ELECTRQ	100UF	16WV		
C110			CE04LW1A101M	ELECTRQ	100UF	10WV		
C111,112			CE04LW1H010M	ELECTRQ	1.0UF	50WV		
C113,114			CC45FSL1H221J	CERAMIC	220PF	J		
C115,116			CC45FSL1H101J	CERAMIC	100PF	J	E	
C117,118			CE04LW1A470M	ELECTRQ	47UF	10WV		
C121			CE04LW1J101M	ELECTRQ	100UF	63WV		
C122			CE04LW1H470M	ELECTRQ	47UF	50WV		
C123,124			CE04LW1V100M	ELECTRQ	10UF	35WV		
C125-128			CF92FV1H104J	MF	0.10UF	J	E	
C127,128			CF92FV1H473J	MF	0.047UF	J	KPUUEM	
C127,128			CF92FV1H473J	MF	0.047UF	J	X	
C129,130	*		C90-1777-05	ELECTRQ	5600UF	56WV		
C131	*		CE04LW1J220M	ELECTRQ	22UF	63WV		
C132	*		CE04LW1C470M	ELECTRQ	47UF	16WV		
C135	*		CE04LW1E222M	ELECTRQ	2200UF	25WV		
C137	*		CE04LW1C101M	ELECTRQ	100UF	16WV		
C140	*		CK45FB1H102K	CERAMIC	1000PF	K		
C141			CE04LW1V220M	ELECTRQ	22UF	35WV		
C142			CE04LW1C470M	ELECTRQ	47UF	16WV		
C143-146			CK45FF1H472Z	CERAMIC	4700PF	Z	E	
C147			C90-1349-05	NP-ELEC	1UF	50WV		
C148,149			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C150,151			CK45FF1H472Z	CERAMIC	4700PF	Z	E	
C155,156			CE04LW1H010M	ELECTRQ	1.0UF	50WV	E	
C157			C90-1349-05	NP-ELEC	1UF	50WV		
C161,162			C91-0769-05	CERAMIC	0.01UF	M		
C163			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C164,165			CC45FSL1H220J	CERAMIC	22PF	J	E	
TC1			C05-0302-05	TRIMMER CAPACITOR(11PF)				
TC2 ,3			C05-0303-05	TRIMMER CAPACITOR(20PF)				
E1	2C	*	E20-0321-05	LOCK TERMINAL BOARD ANT			E	

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E1	2C	*	E20-0476-05	LOCK TERMINAL BOARD ANT			
E1	2C	*	E20-0476-05	LOCK TERMINAL BOARD ANT	KPUUEM		
E2	2C		E13-0446-05	PHONE JACK (4P)	X		
E4	1C		E13-0820-05	PHONE JACK			
E5	1C		E20-0823-05	TERMINAL BOARD (8P) SPEAKERS			
E7	1A		E11-0162-05	PHONE JACK (3P)			
CF1 , 2			L72-0531-05	CERAMIC FILTER			
CF1 , 2			L72-0531-05	CERAMIC FILTER	KPUUEM		
CF1 , 2			L72-0536-05	CERAMIC FILTER	X		
CF3			L72-0099-05	CERAMIC FILTER	E		
CF4			L72-0096-05	CERAMIC FILTER			
L1			L31-0594-05	FM-RF COIL			
L2			L31-0520-05	FM-RF COIL			
L3			L31-0580-05	FM-RF COIL			
L4			L31-0579-05	FM-RF COIL	KPUUEM		
L4			L31-0579-05	FM-RF COIL	X		
L4 , 5			L31-0579-05	FM-RF COIL			
L6			L40-1092-17	SMALL FIXED INDUCTOR(1UH,M)			
L7			L32-0318-05	FM OSCILLATING COIL			
L8			L30-0427-15	FM IFT			
L9			L40-1092-17	SMALL FIXED INDUCTOR(1UH,M)			
L10			L31-0509-05	MW-RF COIL			
L11			L32-0277-15	MW OSCILLATING COIL			
L12			L40-1092-17	SMALL FIXED INDUCTOR(1UH,M)			
L13			L30-0362-05	AM IFT			
L14			L30-0439-15	FM IFT			
L15			L40-1021-14	SMALL FIXED INDUCTOR(1.0MH,K)			
L16			L79-0125-05	LC FILTER			
L17			L79-0739-05	LC FILTER	E		
L18 , 19			L39-0085-05	PHASE-COMPENSATION COIL			
X1			L77-0573-05	CRYSTAL RESONATOR(4.5MHZ)			
D			N09-1236-05	TAPPING SCREW (3X16)			
CP1			R90-0187-05	MULTI-COMP	0.22X2	K 5W	
R35			RD14NB2E101J	RD	100	J 1/4W	KPUUEM
R35			RD14NB2E101J	RD	100	J 1/4W	X
R35		*	RD14NB2E151J	RD	150	J 1/4W	E
R38		*	RD14NB2E221J	RD	220	J 1/4W	
R46			RD14NB2E101J	RD	100	J 1/4W	
R49		*	RD14NB2E330J	RD	33	J 1/4W	
R55			RD14NB2E101J	RD	100	J 1/4W	
R145			RD14GB2E101J	FL-PROOF RD	100	J 1/4W	
R147, 148			RD14NB2E101J	RD	100	J 1/4W	
R169			RD14NB2E101J	RD	100	J 1/4W	
R181, 182			RS14KB3D100J	FL-PROOF RS	10	J 2W	
R187			RD14NB2E4R7J	RD	4.7	J 1/4W	
R199, 200			RS14KB3D332J	FL-PROOF RS	3.3K	J 2W	
R203, 204			RS14KB3A561J	FL-PROOF RS	560	J 1W	
VR1			R12-3130-05	TRIMMING POT.(33K) FM TUNE			
VR2			R12-3126-05	TRIMMING POT.(10K) AM TUNE			
VR3			R12-1089-05	TRIMMING POT.(4.7K)VCO			
VR4			R12-5060-05	TRIMMING POT.(220K)FM SEPA			
S1	1A	*	S42-2170-05	PUSH SWITCH (SPEAKERS)			
S2	2C		S31-2132-05	SLIDE SWITCH (EMPHA/CH-SPACE)	UUEM		

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S3	1C		S31-2136-05	SLIDE SWITCH (IMPEDANCE)		
D1 -4			2SC1740S(Q, R) KV1310-4	TRANSISTOR VARIABLE CAPACITANCE DIODE	UE	ME
D1 ,2			KV1310-3	VARIABLE CAPACITANCE DIODE	KPUU	M
D1 ,2			KV1310-3	VARIABLE CAPACITANCE DIODE	X	
D4			KV1310-3	VARIABLE CAPACITANCE DIODE	KPUU	M
D4			HZS5.1N(B2)	VARIABLE CAPACITANCE DIODE	X	
D5			RD5.1ES(B2)	ZENER DIODE		
D5			KV1236(Z2)	ZENER DIODE		
D6			HSS104	VARIABLE CAPACITANCE DIODE		
D8 -18			ISS133	DIODE		
D19			HZS3.3N(B2)	ZENER DIODE		
D19			RD3.3ES(B2)	ZENER DIODE		
D20			HZS5.1N(B2)	ZENER DIODE		
D20			RD5.1ES(B2)	ZENER DIODE		
D21 -24			HSS104A	DIODE		E
D21 -24			ISS131	DIODE		E
D23 ,24			HSS104A	DIODE	KPUU	M
D23 ,24			HSS104A	DIODE	X	
D23 ,24			ISS131	DIODE	KPUU	M
△ D23 ,24			ISS131	DIODE	X	
D25			RBV-602LFA	DIODE		
D26			S5566B	DIODE		
D27			HSS104A	DIODE		
D27			ISS131	DIODE		
D29 -32			S5566B	DIODE		
D34 ,35			HSS104	DIODE		
D34 ,35			ISS133	DIODE		
D36			HSS104A	DIODE		
D36			ISS131	DIODE		
IC1			LA1265	IC(FM/AM TUNER)		
IC2			CX-7925B	IC(DIGITAL SELECT PLL)		
IC3			AN7470	IC(FM MPX)		
IC4			M5218P-A	IC(OP AMP X2)		
IC4			NJM4558D-A	IC(OP AMP X2)		
△ IC5			LC7820	IC(ELECTRO CONTROL SWITCH)		
△ IC6			TC9215P	IC(ANALOG SWITCH X 6)	KPUU	M
△ IC7		*	STK4201/2	IC	X	
△ IC7		*	STK4201/2	IC	E	
△ IC7		*	STK4201/5	IC		
IC8			UPC7812HF	IC(VOLTAGE REGULATOR/ +12V)		
Q1			2SK241(Y)	FET	KPUU	M
Q1			2SK241(Y)	FET	X	
Q1			3SK73(GR)	FET	E	
Q2			2SC1923(Ø)	TRANSISTOR		
Q3 ,4			2SC1923(R, Ø)	TRANSISTOR		
Q5			2SK161(Y, GR)	FET	E	
Q6			2SC1923(R, Ø)	TRANSISTOR		
Q7			2SC1845(F, B)	TRANSISTOR		
Q8			2SC1740S(Q, R)	TRANSISTOR	KPX	
Q8			2SC945(A)(Q, P)	TRANSISTOR		
Q8			2SC945(A)(Q, P)	TRANSISTOR	KPUU	M
Q8 ,9			2SC945(A)(Q, P)	TRANSISTOR	X	

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Q10 ,11			2SC945(A)(Q,P)	TRANSISTOR		
Q12			DTC124ES	DIGITAL TRANSISTOR		
Q13			DTA114ES	DIGITAL TRANSISTOR		
Q14			DTC124BS	DIGITAL TRANSISTOR		
Q15			DTA114ES	DIGITAL TRANSISTOR		
Q17 ,18			2SC2878(B)	TRANSISTOR		
Q19			2SA733(A)(Q,P)	TRANSISTOR		
Q19			2SA933S(Q,R)	TRANSISTOR		
Q20 ,21			2SC2878(B)	TRANSISTOR		
Q22			2SA733(A)(Q,P)	TRANSISTOR		
Q22			2SA933S(Q,R)	TRANSISTOR		
Q25			2SA733(A)(Q,P)	TRANSISTOR		
Q25			2SA933S(Q,R)	TRANSISTOR		
Q26 ,27			2SC1845(F,E)	TRANSISTOR		
Q29 ,30			2SA733(A)(Q,P)	TRANSISTOR		
Q29 ,30			2SA933S(Q,R)	TRANSISTOR		
Q31			2SD1266	TRANSISTOR		

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**KR-A5010**

# KR-A5010

## SPECIFICATIONS

### AUDIO SECTION

#### Rated Power Output (Except for Europe)

60 watts per channel minimum RMS, both channels driven at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.5% total harmonic distortion. (FTC)

#### Maximum continuous output power (For Europe)

(IEC) from 63 Hz to 12,500 Hz 0.7% T.H.D.  
at 8 ohms ..... 60 W + 60 W

(DIN) 1,000 Hz at 4 ohms ..... 60 W + 60 W

#### Total Harmonic Distortion

(1 kHz 8 ohms) ..... 0.1%

#### Input Sensitivity/Impedance

PHONO (MM) ..... 2.5 mV/47 kohms  
CD, TAPE, VIDEO ..... 150 mV/47 kohms

#### Frequency Response

CD, TAPE, VIDEO ..... 10 Hz - 70 kHz +0 dB  
-3 dB

#### Signal-to-Noise Ratio (IHF-A)

PHONO (MM) ..... 70 dB  
CD, TAPE, VIDEO ..... 100 dB

#### Graphic Equalizer

Center Frequency ..... 60 Hz, 300 Hz, 1 kHz,  
3 kHz, 10 kHz

Control Range ..... ±12 dB

### FM TUNER SECTION

Tuning Frequency Range ..... 87.5 MHz - 108 MHz  
Antenna Impedance ..... 300 ohms balanced &  
75 ohms unbalanced

#### Sensitivity

IHF ..... 11.2 dBf (2.0 μV at 300 ohms)  
DIN (MONO) ..... 0.9 μV  
(STEREO) ..... 25 μV

#### Signal-to-Noise Ratio at 65 dBf (IHF)

Mono ..... 78 dB  
Stereo ..... 72 dB

#### Total Harmonic Distortion at 1,000 Hz

Mono ..... 0.2%  
Stereo ..... 0.3%

Frequency Response ..... 30 Hz to 15 kHz +1.0 dB  
-2.5 dB

Stereo Separation ..... 40 dB at 1 kHz

### AM TUNER SECTION

#### Tuning Range

530 kHz - 1,610 kHz  
(with the AM tuning interval set at 10 kHz)  
531 kHz - 1,602 kHz  
(with AM tuning interval set at 9 kHz)

Usable Sensitivity ..... 10 μV (320 μV/m)

Signal-to-Noise Ratio ..... 50 dB

Total Harmonic Distortion ..... 0.45%

Selectivity ..... 25 dB

### GENERAL

Power Consumption ..... 2.0A...USA Model/150 W..Others

Dimensions ..... 440 (W) × 133 (H) × 284 (D) mm  
(17-5/16" × 5-1/4" × 11-3/16")

Weight (Net) ..... 6.0 kg (13.2 lb)

#### Note:

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

#### Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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